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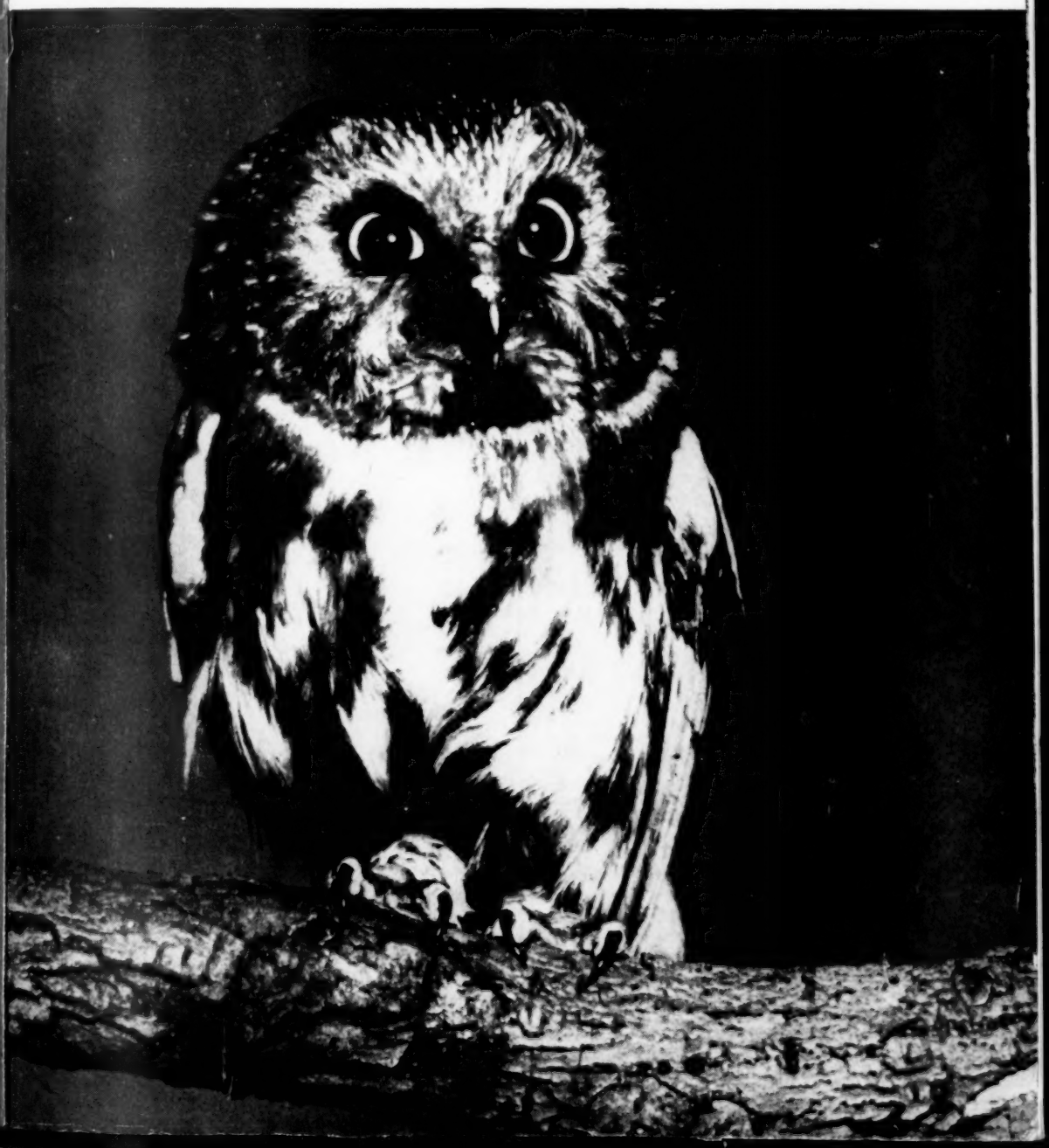
Audubon Field Notes

Published by the National Audubon Society in Collaboration with the U. S. Fish & Wildlife Service

49th CHRISTMAS BIRD COUNT

Volume 3, No. 2 April 1949



AUDUBON FIELD NOTES

A bimonthly magazine devoted to the results of bird watching

Published by the National Audubon Society in Collaboration with the U. S. Fish & Wildlife Service

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AUDUBON FIELD NOTES regrets that it cannot continue subscriptions beyond date of expiration. Checks and money orders should be made payable to AUDUBON FIELD NOTES. Editorial offices, 1000 Fifth Avenue, New York 28, N. Y. Entered as second-class matter February 3, 1947, at the Post Office, New York, New York, under the Act of March 3, 1879. Copyright 1949 by the National Audubon Society.

Postmaster: If undeliverable, please notify Audubon Field Notes on form 3578 at 1000 Fifth Avenue, New York 28, N. Y.

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Saw-whet owl on Cover by Richard B. Fischer. Photograph Taken on Croton Point Christmas Bird Count.

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Photographic Contest

The picture on the cover came in as a result of our contest. Let's have more of them! Satisfactory photographs of appropriate subjects will be used as needed. No print will be returned unless requested and accompanied by self-addressed stamped envelope. (Photographs must be glossy prints, 8 x 10 inches in size).

Blackbirds by Allan D. Cruickshank

Forty-Ninth Christmas Bird Count

For the forty-ninth time amateur and professional bird students throughout the United States and southern Canada joined forces in one of the largest cooperative bird studies ever attempted. Unfortunately, methods are not sufficiently standardized to permit detailed statistical analyses of the results; nevertheless, the Christmas Counts do provide a great deal of information on the distribution and relative abundance of birds in many parts of the United States and Canada from year to year.

The increasing interest in Christmas Counts brought in nearly 15 per cent more reports than were received in any previous year, and the editors regret that several reports which satisfied the rules of dates and hours afield could not be printed due to space limitations.

Increased attention given to large flocks of blackbirds in various parts of the South has not only raised the total number of individuals on the 1948 Christmas Count to almost 60 per cent more than ever before reported, but also focuses attention upon the possibility of damage to crops that may be inflicted by such enormous concentrations, and explains why there has been a congressional demand for special investigation of reported damage by blackbirds in certain sections. Estimating of flocks of birds which run into the hundred thousands and millions has introduced a new problem for Christmas Count participants. An inaccuracy of up to 1,000,000 in estimating a single flock of birds makes it almost pointless to present a total of all birds reported.

Attention is directed to two recent articles which deal with this problem. James Hodges, in the December 1948 issue of *Iowa Bird Life*, published a plea for more actual counting and less estimating; and Robert Arbib, in the February 1949 issue of the *Linnaean News-Letter*, described the method by which he gained his skill in estimating numbers up to 1000 with less than a 4 per cent margin of error (by estimating increasingly large numbers of rice grains scattered on a table top). The Reelfoot Lake observers, who bore the brunt of the first attacks upon accuracy in estimates, did a very creditable job of estimating this year; their method is published along with their count (number 210).

Photography can also be of great assistance in estimation, provided the birds are seen at close range. By photographing sample flocks, or parts of large flocks, and counting the number of pin pricks necessary to punch a hole through each bird on an enlargement of the photograph, fairly accurate counts may be made in many cases. Such a procedure was followed with the accompanying photo-

graph of mixed blackbirds in flight. Test your skill by estimating the number of birds in the picture, and comparing your result with the actual count made on the large print from which the reproduction was made; this number will appear elsewhere in this summary.

The table which follows will demonstrate the trend in Christmas Counts for the past 10 years. The effect of the war in limiting the number of observers and the number of printed reports is well shown. Even more striking were the results of restrictions on the use of binoculars in the coastal areas, as evidenced by reduction in the highest counts of species. The 1948 season brought substantial increases in everything except the very highest count. The number of counts reporting astronomical numbers of individuals, however, is quite unpredictable. Two years ago only 2 groups reported more than 100,000 birds; last year 11 counts were in excess of this figure; and now, we are back to 4. Of these 4, however, 3 contained over 1,000,000 individuals, and made up nearly three-fourths of the grand total. Durant, Okla., was in the lead with 3,003,326 (3,000,000 *unidentified* blackbirds); then followed Reelfoot Lake, Tenn., with 2,502,565 (2,430,000 red-wings); Susquehanna Flats, Md., with 1,011,883 (800,000 red-wings, 200,000 purple grackles); and Houston, Tex., with 102,488 (50,000 brown-headed cowbirds, 40,000 Brewer's blackbirds).

Year	Reports Printed	Total Individuals	Total Observers	No. with 100 Sp.	Largest No. of Species
1939	262	2,100,000	1900	15	154 Harlingen
1940	299	2,000,000	2200	12	132 Harlingen
1941	307	4,000,000	2400	11	123 Charleston
1942	250	3,600,000	1620	5	124 Charleston
1943	265	2,600,000	1840	7	127 Charleston
1944	262	5,500,000	2120	7	132 Los Angeles
1945	288	3,100,000	2300	7	136 Los Angeles
1946	316	1,900,000	3140	15	151 Los Angeles
1947	314	5,600,000	3470	18	163 Harlingen
1948	357	8,800,000	3670	21	146 Harlingen

Weather.—Following a November that was abnormally warm over all but the Rockies and the Pacific states, the month of December was characterized by subnormal temperatures in the northern plains and western United States, and unseasonably warm weather throughout the remainder of the country. These conditions persisted quite uniformly from the beginning of the month until Christmas day. As a result of the uniformly warm weather in the central and eastern part of the country, and the lack of the usual cold snaps, many of the later fall migrants were delayed by as much as 1 to 4 weeks, and Christmas bird counters looked forward to finding a number of late transients on their lists. The severe cold wave which swept into the Mississippi Valley on the opening day of the count period and rapidly engulfed the entire eastern half of the country caused many of the stragglers to disappear immediately, much to the consternation of the eager bird student. Actually, if Christmas Counts are to give an indication of wintering populations, which was the original intent, the publication of counts taken during "autumn" conditions would not be justified; so it is fortunate indeed that the count period did not start any earlier.

In spite of the late December cold snaps, the number of half-hardy species recorded on the counts was very high; and, what is even more astonishing, a large proportion of the stragglers survived the entire winter, thanks to one of the warmest winter seasons on record in the eastern states.

Variety.—With more and more areas passing the 100 mark it becomes apparent that the identification of 100 species is no longer a noteworthy accomplishment in coastal areas of the South, and is less deserving of mention than lists of 40 or 50 species in the North. Rather than discontinue a time-honored custom without warning, however, areas recording three-digit totals are acknowledged as follows: Harlingen, Tex., 146; Wilmington, N. C., 139; Los Angeles, Calif., 136; Charleston, S. C., 134; St. Augustine, Fla., 134; Ocean City, Md., 123; Tallahassee, Fla., 118; Monterey Peninsula, Calif., 118; Cape May, N. J., 117; St. Marks, Fla., 117; Crystal Springs Reservoir, Calif., 113; St. Petersburg, Fla., 112; Houston, Tex., 110; Cape Cod, Mass., 107; Jacksonville, Fla., 107; Back Bay, Va., 105; St. Francisville, La., 104; Morro Bay, Calif., 104; Salinas, Calif., 102; Pasadena, Calif., 102; and Southern Nassau County, N. Y., 100. Of these the Wilmington, Ocean City, and Cape Cod counts deserve special mention for excellent coverage and for substantially exceeding (thanks in part to the weather) all previous counts in their respective parts of the United States; the Tallahassee total is believed to be the highest yet reported from an inland locality, if we admit that Harlingen, Tex., is in a class all by itself. Some of the other honor roll lists from inland or northern localities are: Portland, Oreg., 89; Salt Lake City, Utah, 87; Louisville, Ky., 77; Newburyport, Mass., 67; Rochester, N. Y., 66; Kansas City, Mo., 63; Milwaukee, Wis., 59; Barr Lake, Colo., 52; Spokane, Wash., 47; Casper, Wyo., 38.

Rarities.—The 1948 Christmas Counts were replete with the usual number of rarities, and with more than the normal complement of late stragglers in the eastern half of the country. With so many interesting records to choose from it is very difficult to select certain ones for comment without leaving out others just as worthy of mention. Once again a summary, which will be found immediately following the individual counts, includes most of the greatest rarities from the southern states but does not show stragglers from the northern states since these same species were found in greater abundance to the south.

Probably the best find of all was a lark bunting which was subsequently collected at Charleston,

W.Va. Other birds of particular interest were: laughing gull at Quincy, Mass.; Franklin's gull at Los Angeles, Calif.; knot at Milwaukee, Wis.; gray-cheeked thrush at Lafayette, Ind.; yellow-breasted chats at Cape Ann and Lynn, Mass.; orchard oriole at Mt. Olive, N.C.; Baltimore orioles at Cape Cod, Mass., and Bronx-Westchester, N.Y.; Bullock's oriole at Northampton, Mass.; grasshopper sparrows at Murphysboro, Ill., and Lancaster, Pa.; and tree sparrows at Eugene, Oreg., and Greensboro, N. C.

General trends.—Of far greater importance than rarities and individual stragglers are widespread changes in bird populations. Some of the greatest shifts between the previous count and this one were directly due to the warm fall and lack of cold weather before the count period. Catbirds were found north to South Dakota, Ohio, West Virginia, and Massachusetts; Savannah sparrows to Ohio and Massachusetts; Am. pipits to Ohio, New York, Connecticut, and Massachusetts; palm warblers to Ohio, New York, and Massachusetts; and numerous pine warblers to the latter state. All these species were reported in greater abundance than usual in the middle Atlantic states.

Hermit thrushes and golden-crowned kinglets were unaccountably scarce in most of the Atlantic coastal states, but the ruby-crowned kinglet was recorded more abundantly than ever before in Maryland and Virginia; a few individuals were still present in Connecticut, Massachusetts, Ohio, and Indiana. While very few pine and evening grosbeaks, crossbills, or redpolls were recorded south of the Canadian border states and red-breasted nuthatches were scarce throughout, the unseasonably warm weather in the East did not prevent noteworthy flights of the rough-legged hawk and snow bunting. The rough-leg concentration was greatest from South Dakota to New York; in the East the flight extended south to Maryland, where six counts reported this species, compared with one last year. Snow buntings were found south to Wisconsin, Ohio, and North Carolina.

The vermilion flycatcher, which is common in southern Texas, was recorded north to Commerce in the northeastern part of the state, and was also found at Tallahassee and St. Marks in northern Florida.

Of particular interest were the concentrations of snow and blue geese in the northern Mississippi valley. Illinois observers alone reported 1700 blues and 6450 snows, although neither species was recorded from that state in the 1947 counts. Stragglers of both species were found as far north as Milwaukee, and snow geese were seen at Detroit, and at Youngstown, Ohio. There were many other shifts in waterfowl populations, largely due to the delayed fall flight, although coverage of new areas and elimination of certain old ones has obscured some of these shifts. Scoters and black ducks had not reached normal wintering numbers along much of the Atlantic coast, but on the other hand, there were fine increases in brant and in baldpate, gadwalls, and coot. It was particularly interesting to find that many of the redheads which were missed on the Maryland and Virginia wintering grounds were recorded in the Finger Lake region of New York. Unfortunately, comparative data from the principal waterfowl wintering grounds in other parts of the country are too meager to warrant drawing conclusions.

Observers.—The average number of observers per report dropped from 11 in 1947 to less than 10 in 1948. This was due in part to the large number of new areas (which normally have only a small number of participants in their first year) and partly to a decrease in the number of counts having very large numbers of observers. The three areas covered by the largest number of counters were Northampton, Mass., with 57; Portland, Oreg., with 57; and Cape May, N. J., with 56.

Several years ago observers were requested not to submit more than one count per year due to limitations on the size of the Christmas Count issue. More recently this rule has been relaxed, and in several instances observers have participated in several very worth while reports. This makes us hesitate to renew the restriction, but at the same time some measures will need to be taken to keep the number of reports within bounds. In making plans for future years, it will be well for new groups of observers to assist in counts already in progress or to start new areas only where needed to fill gaps (see map). Such new areas should be covered by several participants if possible, and not be undertaken until considerable scouting work has been done, and a representative list assured. If censuses must be rejected to conform to available space, they will be those which appear not to be representative of the region (judging from a comparison with counts from nearby areas), and those from new areas of regions which are already well covered.

Editorial policy.—There continues to be diversity of opinion regarding the status of the "domestic" pigeon or rock dove. In some sections the vast majority of pigeons are known to be privately owned, and it is practically impossible to say that a given bird in winter is living a wild existence. The majority of city pigeons have been living in just as wild a state as English sparrows for many generations, whereas country birds are more likely to be semidomestic occupants of dove-cotes. In the present report the inclusion of the rock dove has rested upon the evidence submitted by individual compilers.

Professor Samuel A. Eliot, Jr., very kindly agreed to edit the New England counts in spite of an illness which prevented his taking part in the actual counts; and Philip A. DuMont did those from the same midwestern states he covered last year. Counts from the other areas were edited by Dr. John W. Aldrich and Chandler S. Robbins, and all were checked by Mrs. Margaret Brooks Hickey. The

editors express their grateful appreciation to Professor Eliot, Mr. DuMont, and Mrs. Hickey for the tremendous amount of painstaking work they contributed.

Special credit and the sincere gratitude of the editors goes to the following compilers who followed all instructions and submitted technically perfect or nearly perfect reports: William C. Baker (Salem, Ohio), Francis M. Weston (Pensacola, Fla.), Fred R. Scott (Yorktown, Va.), Charles H. Rogers (Princeton, N.J.),; George H. Lowery and R. J. Newman (St. Francisville, La.), and Ellis H. Shimp (Clairton, Pa.).

Careful examination of the photograph from which the blackbird cut was made reveals that the number of birds visible in that part of the picture appearing on page 35 is approximately 5510.—CHANDLER S. ROBBINS.

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1. Oahu, Hawaiian Islands (Alewa Heights, Kapalama Heights, McKinley High School, Woodlawn, Halawa Trail, Tantalus Trail, Woodlawn-St. Louis Trail, Kaelepulu Pond, Kuapa Pond, Mokapu Peninsula-Ulupau Head; open country 12%, residential area 3%, lower forest 52%, upper forest 14%, ponds and marshes 19%).—Dec. 26; 7 a.m. to 4 p.m. Overcast; frequent rain; temp. 60° to 78°; wind NNE, 19-38 m.p.h.; ground wet; water brackish. Eighteen observers in 7 parties. Total hours, 21¾ (on foot); total miles, 112 (20 on foot, 92 in car). Brown booby, 13; red-footed booby, 671 (658 adults, 13 immature plumage); frigate bird, 19; black-crowned night heron, 5; Hawaiian duck, 5; pintail, 1400 (1250 est., 150); shoveller, 9; Am. coot, (Hawaiian), 915; golden plover (Pacific), 133; ruddy turnstone, 268; wandering tattler, 10; sanderling, 5; Hawaiian stilt, 134; noddy tern, 1; sooty tern, 2; barred dove, 215; Chinese dove, 43; elepaio (Oahu), 99; amakihi (Oahu), 50; apapane, 23; Chinese thrush, 1; Japanese hill robin, 41; white-eye, 100; mynah, 175; ricebird, 199; Brazilian cardinal, 17; Kentucky cardinal, 16; house finch, 6; English sparrow, 44. **Total,** 29 species; about 4619 individuals.—Stanley Adams, Harlan Chong, Carolyn Crawford, Charles M. Dunn, Julia Evans, Mary Evans, Mr. and Mrs. James G. Groves, Mr. and Mrs. E. B. Hamilton, Grenville Hatch, Sigurd Jensen, Unoyo Kojima, Mrs. B. Kuhns, Ruth D. Porter, Ruth R. Rockafellow, Euphie G. M. Shields, George Sonoda.

2. Cienfuegos, Cuba (Soledad Central—Atkins Garden and Research Laboratory, Rio Arimeo and Monte de San Joaquin; cane fields and fence rows 75%, open woods 10%, thick second-growth tangles 10%, stream border 5%).—Jan. 2; 8 a.m. to 5 p.m. Clear and sunny; temp. 65° to 80°; wind 1-7 m.p.h.; soil dry. Four observers in 3 parties. Total miles, about 15. Least grebe, 3; pied-billed grebe, 2; great blue heron, 1; Am. egret, 50; snowy egret, 1; little blue heron, 4; green heron, 2; turkey vulture, 50; marsh hawk, 2; sparrow hawk, 8; limpkin, 7 (2 young); purple gallinule, 2; Central American jacana, 2; killdeer, 2; mourning dove, 100 (±10); white-winged dove, 2; ground dove, 6; Cuban lizard cuckoo, 10; smooth-billed ani, 100 (±10); Antillean nightjar, 1; Cuban emerald hummingbird, 10; Cuban tody, 9; West Indian red-bellied woodpecker, 2; Cuban green woodpecker, 2; loggerhead flycatcher, 12; stolid flycatcher, 2; Greater Antillean pewee, 9; mockingbird (*Mimus polyglottos*), 12; catbird, 10; western red-legged thrush, 8; blue-gray gnatcatcher, 25; Cuban vireo, 4; yellow-throated vireo, 3; black and white warbler, 6; Swainson's warbler, 1; worm-eating warbler, 10; parula warbler, 15; Cape May warbler, 1; black-throated blue warbler, 8; yellow-throated warbler, 1; prairie warbler, 7; palm warbler, 30; oven-bird, 12; Louisiana water-thrush, 6; yellow-throat, 2; Am. redstart, 15; Cuban blackbird, 10; Greater Antillean oriole, 5; eastern meadowlark (Cuban), 10; striped-headed tanager, 15; yellow-faced grassquit, 10; Cuban grassquit, 2; Savannah sparrow, 2. **Total,** 53 species; about 631 individuals.—Ernest P. Edwards, George E. Grube, Stephen W. Eaton, F. G. Walsingham.

3. Sackville, N. B. (area around West Sackville, Sackville, Jollicur Lakes and head of Cumberland Basin; coniferous forest 50%, salt marshes and salt water 30%, cultivated lands 20%).—Jan. 1; 8 a.m. to 4.30 p.m. Cloudy to partly clear; temp. 35° to 40°; calm; no snow on ground; lakes frozen over. Two observers together. Total hours, 17 (2 in car, 15 afoot); total miles, 75 (40 by car, 35 by foot). Black duck, 34; Am. merganser, 1; ring-necked pheasant, 4; great black-backed gull, 2; herring gull, 12; hairy woodpecker, 2; downy woodpecker, 2; common raven, 15; Am. crow, 14; black-capped chickadee, 42; brown-capped chickadee (Acadian), 16; brown creeper, 1; golden-crowned kinglet, 14; starling, 538 (500 est., 38); English sparrow, 48; Am. goldfinch, 1; white-winged crossbill, 8; slate-colored junco, 1; swamp sparrow, 1; Lapland longspur, 4. **Total,** 20 species; about 760 individuals. (Seen in area Dec. 22: green-winged teal, 25; Lapland longspur, 79; snow bunting, 125.) —Joan and George Boyer.

4. Woodstock, N. B. (Golf Links, Paynter's pasture, Meduxnekeag River as far as dam, woods along road to Kilmarnock Deadwater; coniferous forest 30%, mixed forest 40%, cultivated land and

overgrown pasture 20%, river shore line 10%).—Dec. 26; 8 a.m. to 4:30 p.m. Overcast; temp. 10° to 20°; wind NW, 1-7 m.p.h.; ground covered with 2-in. snow, some fields bare; extensive patches of open water in rivers. Two observers together. Total hours, 17 (on foot); total miles, 30 (on foot). Am. golden-eye, 15; Am. merganser, 1; goshawk, 1; ring-necked pheasant, 4; blue jay, 2; Am. crow, 1; black-capped chickadee, 60; brown-capped chickadee (Acadian), 7; red-breasted nuthatch, 10; brown creeper, 2; starling, 553 (500 est., 53); English sparrow, 48; common redpoll, 8; white-winged crossbill, 3; slate-colored junco, 3. **Total,** 15 species; about 718 individuals.—Joan and George Boyer.

5. Hudson Heights, Que. (same area as in 1947; coverage not as complete as in previous counts).—Jan. 2; 8 a.m. to 4:30 p.m. Very dull after night of wet snow; temp. 23° to 30°F.; wind W, 3 m.p.h.; bar. 29.50; ground covered with 12-in. wet snow; branches of trees, twigs, and bushes snow-coated, obscuring visibility; running streams open; general visibility poor. Nineteen observers in 7 parties. Total hours, 32 (20½ on skis, 11½ on foot); total miles, 43½ (30½ on skis, 13 on foot). Hairy woodpecker, 1; downy woodpecker, 2; blue jay, 81; Am. crow, 3; black-capped chickadee, 106; white-breasted nuthatch, 10; red-breasted nuthatch, 1; brown creeper, 1; starling, 39; English sparrow, 29; common redpoll, 75 (in 4 small flocks); slate-colored junco, 3; tree sparrow, 2; snow bunting, 12. **Total,** 14 species; 365 individuals. (Seen in area Dec. 29, evening grosbeak, 10; Jan. 1, ruffed grouse, 2, screech owl, gray phase, 1.)—Vi. Bryan, Amy Clarke, Ed. and Eunice Croll, Brian Heeney, Althea Macaulay, Dunbar and Violet Mullan, John and Mary Mullan, Cecil and Johnny Nelson, Geof. and Kate Ommanney, Betty Puxley, George and Drucilla (Sr. and Jr.) Riley, Ted. Watson, Mack. Yuile.

6. Quebec, Que. (same area as in 1947, except Ste. Foy not covered; town suburbs 10%, fields 23%, coniferous forests 15%, deciduous woods 6%, mixed woodlands 39%, shores 7%).—Dec. 28; 7:15 a.m. to 4:20 p.m. Clear to cloudy; temp. 20° to 25°; wind SW, 1-7 m.p.h.; 8-in. snow on ground; small rivers completely frozen, moving ice on St. Lawrence River. Four observers in 3 parties. Total hours, 19 (on foot); total miles, 19 (on foot). Ring-necked pheasant, 2; herring gull, 1; barred owl, 1; blue jay, 1; Am. crow, 40; black-capped chickadee, 36; red-breasted nuthatch, 1; Bohemian waxwing, 1; starling, 31; English sparrow, 110; evening grosbeak, 71; pine grosbeak, 2; common redpoll, 128; white-winged crossbill, 6. **Total,** 14 species; 431 individuals. (Seen in area Dec. 23, slate-colored junco, 1; Dec. 10, rusty blackbird, 1, probably a late migrant; also on Count day, 1 saw-whet owl found dead, body frozen and clinging by a toe to a low spruce branch.—R.C.)—Louis- A. Lord, François Hamel, Henri Talbot, Raymond Cayouette (La Société Zoologique de Québec).

7. Blenheim (Kent Co.), Ont. (Fargo, Blenheim, Morpeth, Cedar Spring, Erie Beach, Erieau and Rondeau Provincial Park; farmland 65%, water 20%, woods 12%, marsh 2%, town 1%).—Dec. 28; 8:30 a.m. to 5 p.m. Overcast, with sunshine in p.m. for ½ hour; temp. 38° F. at noon; wind, gentle to moderate; visibility fair; ground with very slight film of snow in sheltered spots; Lake Erie open; Rondeau Bay partially frozen; Erieau Harbour open; marsh areas frozen. Twenty observers in 5 parties. Total party-hours, 36; total party-miles, 115 (30 on foot, 85 by car). Whistling swan, 1; Canada goose, 200; canvas-back, 7; Am. golden-eye, 4; Am. merganser, 27; red-breasted merganser, 2; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 2; rough-legged hawk, 13; bald eagle, 7; marsh hawk, 7; sparrow hawk, 1; ring-necked pheasant, 1; Am. coot, 6; great black-backed gull, 2; herring gull, 150; Bonaparte's gull, 2000; mourning dove, 91; screech owl, 1; horned owl, 1; red-headed woodpecker, 4; hairy woodpecker, 15; downy woodpecker, 41; blue jay, 43; Am. crow, 798; black-capped chickadee, 14; white-breasted nuthatch, 5; brown creeper, 2; winter wren, 1; robin, 17; golden-crowned kinglet, 30; cedar waxwing, 2; starling, 244; English sparrow, 1420; redwing, 6; rusty blackbird, 75 (H.E.); cardinal, 42; evening grosbeak, 1; pine siskin, 6; white-winged crossbill, 4; vesper sparrow, 4 [no details—Ed.]; slate-colored junco, 80; tree sparrow, 140; field sparrow, 3; white-throated sparrow, 2; song sparrow, 2. **Total,** 47 species; 5526 individuals. (Seen recently: long-eared owl, eastern bluebird, horned lark, snow bunting.)—D. A. Arnott, C. M. Anderson, R. Barry, D. Blackburn, L. Bohn, Jane Bohn, K. Davey, H. English, H. Evans, C. J. Fox, R. E. Graves, W. M. Gray, C. H. Hand, W. King, G. F. Manson, Bob Manson, G. McGarvin, J. L. Whitlock, H. B. Wressel, C. H. Zavitz (Kent Nature Club and friends).

8. Columbus, Ont. (Oshawa lake shore and 6 miles north; marshland, cedar and hemlock groves, open farmland, and deciduous farm woodlots).—Dec. 27; 10:30 a.m. to 5 p.m. Overcast; temp. 23° to 30°; no snow in lowlands to several inches in highlands. Total hours, 19; total miles, 16 (on foot). Sharp-shinned hawk, 1; red-tailed hawk, 1; marsh hawk, 2; sparrow hawk, 6; ruffed grouse, 9 (1 dead); ring-necked pheasant, 1 (dead); herring gull, 37; mourning dove, 3; horned owl, 2; barred owl, 1; hairy woodpecker, 1; downy woodpecker, 9; blue jay, 7; Am. crow, 9; black-capped chickadee, 53; white-breasted nuthatch, 1; robin, 3; golden-crowned kinglet, 3; starling, 523; English sparrow,

27; eastern meadowlark, 1; cardinal, 1; slate-colored junco, 36; tree sparrow, 66; chipping sparrow, 9 (1 seen by J. L. Baillie in same area in 1947—A.S.) [no further details—Ed.]; snow bunting, 12. **Total,** 26 species; 824 individuals.—Arthur Slyfield, William Alger, Peter Baluk, Robert Clayton, Daniel Crozier, David Fletcher, Roy Hartley (Burroughs Field Naturalists' Club).

9. Hamilton, Ont. (Dundas Valley west to Ancaster, Hamilton and harbor, Burlington Beach, Bronte, Aldershot, Waterdown).—Dec. 26; 8 a.m. to 5 p.m. Clear; temp.-4° to 23° F.; wind SW, 10 m.p.h.; ground bare to 1-in. old snow on heights; streams frozen, harbor open. Thirty-seven observers in 16 parties. Total hours, 83; total miles, 176 (114 on foot, 62 by car). Common loon, 1; Holboell's grebe, 2; double-crested cormorant, 1; mallard, 12; black duck, 55; redhead, 1; canvas-back, 4; greater scaup duck, 45; Am. golden-eye, 318; buffle-head, 10; old-squaw, 8; white-winged scoter, 2; Am. scoter, 1; hooded merganser, 5; Am. merganser, 703; red-breasted merganser, 130; Cooper's hawk, 3; red-tailed hawk, 11; rough-legged hawk, 4; sparrow hawk, 4; ruffed grouse, 13; ring-necked pheasant, 16; Am. coot, 3; great black-backed gull, 47; herring gull, 1277; ring-billed gull, 8; mourning dove, 1; screech owl, 4; horned owl, 15; barred owl, 2; long-eared owl, 2; belted kingfisher, 1; yellow-shafted flicker, 4; hairy woodpecker, 12; downy woodpecker, 56; horned lark, 1; blue jay, 71; Am. crow, 3; black-capped chickadee, 230; white-breasted nuthatch, 27; brown creeper, 29; winter wren, 3; robin, 4; golden-crowned kinglet, 15; cedar waxwing, 25; northern shrike, 2; starling, 2479; English sparrow, 1157; meadowlark [sp.], 4; red-wing, 1; brown-headed cowbird, 1; cardinal, 80; purple finch, 37; redpoll [sp.], 2; Am. goldfinch, 31; vesper sparrow, 1 [no details—Ed.]; slate-colored junco, 396; tree sparrow, 377; swamp sparrow, 4; song sparrow, 20. **Total,** 60 species; 7781 individuals. (Seen recently: red-throated loon, wood duck, ring-necked duck, bald eagle, glaucous gull, Iceland gull (Kumlien's), Bonaparte's gull, catbird, evening grosbeak, pine siskin, white-throated sparrow.)—Eric W. Bastin, Earl Biggrig, Thelma Borman, Neil Bourne, Mr. and Mrs. R. D. F. Bourne, Don Bucknell, Wm. Campbell, K. J. Cox, James Dowell, R. O. Elstone, Mrs. J. G. Farmer, Bob Finlayson, Ian Halladay, Donald Harvey, Donald Holland, George Holland, A. B. Jackson, H. E. Kettle, Margaret Lamb, L. Laking, J. E. Martin, G. O. McMillan, Edward Moore, John Moule, George W. North, David Powell, Mrs. N. M. Robertson, Bob Sergeant, Laura Stewart, Gordon Sweatman, Ann Watson, Mable Watson, Mr. and Mrs. M. R. Watters, J. H. Williams, Laurel E. Williams (Hamilton Nature Club).

10. Kingston (Frontenac Co.), Ont. (City of Kingston, Lake Ontario, Collins Bay, Westbrook, Cataraqui, Parrot Bay; farmland 62%, water 20%, marsh 5%, woods 5%, city 8%).—Dec. 30; 9 a.m. to 5 p.m. Strong winds with intermittent heavy snowfalls; visibility generally poor; temp. at noon 22°; about 5-in. snow; Lake Ontario and larger bays open; marshes frozen. Two observers together. Total man-hours, 14; total man-miles, 92 (72 in car, 20 on foot). Pied-billed grebe, 1; mallard, 2; black duck, 115; Am. golden-eye, 1; Am. merganser, 1; red-breasted merganser, 9; marsh hawk, 1; Am. coot, 2; great black-backed gull, 1; herring gull, 44; horned owl, 1; long-eared owl, 1; blue jay, 1; Am. crow, 1; black-capped chickadee, 15; white-breasted nuthatch, 1; brown creeper, 2; starling, 20; English sparrow, 15; song sparrow, 1. **Total,** 20 species; 235 individuals.—Geo. M. Stirrett, Ted Brown.

11. London, Ont. (valley of the Thames River from London to Delaware; Redman's swamp; Trott's swamp; coves and ponds; part of Dorchester swamp; J. C. Higgins' farm at Lobo; 4 feeding stations in the same area; pasture 5%, deciduous woodland 20%, swamp 20%, mixed wooded river bank 55%).—Dec. 27; 8 a.m. to 5 p.m. Overcast all morning, clearing early afternoon; visibility poor at first; wind SW, 20-25 m.p.h., abating in mid-afternoon; 3-in. snow on the level; temp. 18° at 8 a.m.; river mostly frozen, small stretches open, streams mostly frozen. Thirty-seven observers in 12 parties. Total party-hours, 72; total party-miles, 125 (50 on foot, 75 by car). Great blue heron, 1; mallard, 2; black duck, 1; Am. golden-eye, 46; Am. merganser, 50; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 15; red-shouldered hawk, 1; rough-legged hawk, 9; bald eagle, 3; marsh hawk, 5; sparrow hawk, 1; ruffed grouse, 3; ring-necked pheasant, 11; herring gull, 65; ring-billed gull, 7; mourning dove, 11; screech owl, 1; horned owl, 6; belted kingfisher, 2; hairy woodpecker, 5; downy woodpecker, 34; blue jay, 53; Am. crow, 36; black-capped chickadee, 199; white-breasted nuthatch, 38; red-breasted nuthatch, 2; brown creeper, 23; winter wren, 1; golden-crowned kinglet, 18; starling, 547; English sparrow, 859; rusty blackbird, 5; cardinal, 135; evening grosbeak, 2; purple finch, 56; redpoll [sp.], 25; Am. goldfinch, 21; slate-colored junco, 241; tree sparrow, 198; white-crowned sparrow, 2 [no details—Ed.]; song sparrow, 38; snow bunting, 10. **Total,** 44 species; 2789 individuals. (Seen recently: pileated woodpecker, Dec. 25; yellow-shafted flicker, Dec. 25; myrtle warbler, Dec. 23; short-eared owl, Dec. 9.)—Mary Abbott, Don Coleman, Dr. R. G. Cummings, Mrs. Cummings, John and Tom Cummings, Gerald Davies, Eli Davis, Kay Fetherston, Vernon Franks, Ted Garside, Mrs. W. G. Girling, Frank Girling, Ron Hambly,

Mary and George Harvey, John Higgins, Don Higgins, Mary Hoffman, Howard Keast, Jim Leach, Alan Loughrey, Bessie Marwood, William Morris, Donald Pope, Helen and Ada Shipley, Rod Standfield, Mr. and Mrs. Miller Stewart, Douglas Soper, Margaret Stevens, Don Sutton, Dave Turnbull, Charlie Whitelaw, John and David Wismer (McIlwraith Ornithological Club).

12. Pickering Twp. (Ontario Co.), Ont. (15 acres of mixed woodland; white cedar 20%, hemlock 20%, popular-birch-ironwood-maple 45%, uncultivated fields 15%).—Jan. 2; 3:30 a.m. to 5:30 p.m. Overcast, becoming thin and high overcast; intermittent light snow; temp. 25° to 30°; wind N, 3-6 m.p.h.; snowdrifts up to 2 ft. high in lee of shelter; some bare ground on wind-swept area; pond and stream (except rapid) frozen. Two observers in 2 parties. Total hours, 10; total miles, 2 (on snowshoes and on foot). Cooper's hawk, 1; ruffed grouse, 3; horned owl, 1; hairy woodpecker, 1; blue jay, 7; black-capped chickadee, 2; English sparrow, 18; cardinal, 2; Am. goldfinch, 12; slate-colored junco, 31; tree sparrow, 2. **Total,** 11 species; 80 individuals.—Doris Huestis Speirs, Dr. J. Murray Speirs.

13. Port Hope, Ont. (vicinity of Port Britain, Wesleyville, lake shore east and west of Port Hope; woodland 50%, open fields 20%, lake and harbor 20%, settled area of town 10%).—Dec. 30; 7:40 a.m. to 4:45 p.m. Overcast; very light snow; becoming fairly heavy in late afternoon; temp. 22° at 7:40 a.m.; wind N, 1-7 m.p.h.; ground bare until late afternoon; ponds frozen; Lake Ontario and streams open. Ground hard; crust of ice on pools left on ground by recent rain and thaw. Seven observers in 2 parties. Total hours, 12 (11 on foot, 1 in car); total miles, 18 (8 on foot, 10 in car). Am. golden-eye, 8; Am. merganser, 16; ruffed grouse, 3; herring gull, 23; horned owl, 1; hairy woodpecker, 4; downy woodpecker, 3; blue jay, 2; black-capped chickadee, 28; white-breasted nuthatch, 5; golden-crowned kinglet, 2; northern shrike, 1; starling, 52; English sparrow, 31; cardinal, 4; slate-colored junco, 4; tree sparrow, 4. **Total,** 17 species; 191 individuals.—P. A. K. Giles, H. Reeve, A. B. Schultz, Jr., A. K. Schultz, R. E. Sculthorpe, R. J. W. Sculthorpe, P. M. Smith.

14. Toronto, Ont. (Swansea, Humber River valley from St. Clair Ave. to lake shore; deciduous groves 65%, open fields 15%, cattail marshes 15%, river and lake sand flats 5%).—Dec. 27; 9 a.m. to 5 p.m. Partly cloudy; temp. 28°; little wind; visibility good; slight covering of hard snow; river open to Bloor St., frozen from Bloor to lake. Total hours, 7; total miles, 18 (on foot). Mallard, 200 (est.); black duck, 500 (est.); scaup duck [sp.], 23; Am. golden-eye, 1; buffle-head, 33; old-squaw, 5; red-breasted merganser, 1; red-tailed hawk, 1; ring-necked pheasant, 1; herring gull, 45; downy woodpecker, 12; blue jay, 6; black-capped chickadee, 22; white-breasted nuthatch, 9; brown creeper, 10; winter wren, 1; starling, 80; English sparrow, 78; cardinal, 14; Am. goldfinch, 5; slate-colored junco, 7; tree sparrow, 44; song sparrow, 21. **Total,** 23 species; about 1119 individuals.—J. Tovell, J. E. Humphries.

15. West Elgin, Aldboro and Dunwich Twps.), Ont. (area within 7½-mile radius of West Lorne; grassy marsh 2%, pastureland 16%, pine woods 2%, deciduous woodlot 50%, lake shore 5%, river banks 25%).—Dec. 27; 9 a.m. to 5:30 p.m. High, complete overcast during morning, clearing at noon; temp. 18° at start, 20° at finish; 3-in. settled snow; wind W, 15 m.p.h.; river frozen except rapids, Lake Erie free of ice. Seven observers in 4 parties. Total hours, 19 (18 on foot, 1 by car); total miles, 45 (24 by car, 21 on foot). Am. golden-eye, 58; black duck, 1; hooded merganser, 1; herring gull, 14; sharp-shinned hawk, 1; red-tailed hawk, 3; rough-legged hawk, 15; red-shouldered hawk, 1; marsh hawk, 5; bald eagle, 1; bob-white, 1; ring-necked pheasant, 7; ruffed grouse, 1; mourning dove, 23; horned owl, 4; short-eared owl, 6; yellow-shafted flicker, 1; downy woodpecker, 24; hairy woodpecker, 2; blue jay, 14; Am. crow, 4; black-capped chickadee, 68; white-breasted nuthatch, 12; brown creeper, 3; robin, 4; golden-crowned kinglet, 2; starling, 87; English sparrow, 197; red-wing, 1; brown-headed cowbird, 17; cardinal, 60; Am. goldfinch, 5; slate-colored junco, 122; tree sparrow, 496; white-throated sparrow, 1. **Total,** 36 species; 1268 individuals.—H. L. Lancaster, J. K. Lancaster, R. E. Lemon, V. E. Lemon, A. C. Steele, M. Steele, D. K. Willson (West Elgin Nature Club).

16. Yorkton, Sask. (area 15 miles in diameter with Yorkton as center).—Dec. 26; 9 a.m. to 5 p.m. Overcast in morning, clear in afternoon; temp. 10° at start, 22° at noon; wind SW, 10 m.p.h.; snow averaging 6 inches in depth. Ten observers in 4 groups. Total party-hours afield, 9½ (4 by car, 5½ on foot); total party-miles, 42 (35 by car, 7 on foot). Sharp-tailed grouse, 27; horned owl, 1; hairy woodpecker, 1; downy woodpecker, 2; blue jay, 8; Am. magpie, 4; black-capped chickadee, 9; robin, 1; cedar waxwing, 5 (The robin and cedar waxwings were in the vicinity of an open spring, beside the "Muskeg," just west of Yorkton. Both species were observed for 15 minutes through 10x50 binoculars at distances as close as 12 ft. This ap-

pears to be the first record of cedar waxwings in Saskatchewan during the Christmas season.—C.S.H.); starling, 4; English sparrow, 179; common redpoll, 15; snow bunting, 342 (est.). **Total,** 13 species; approximately 598 individuals. Four cedar waxwings were noted on Dec. 28, and 9 on Jan. 1, in downtown Yorkton. No Bohemian waxwings have been noted thus far this winter.—Wayne Bjorgan, Ken Bowes, Jerry Bulitz, D'Arcy Wershler, Merle Wershler (members Simpson School Nature Club), and Jim Allen, Neil Black, Brother Clarence, C. J. Houston, C. Stuart Houston (Yorkton Natural History Society).

17. Auburn, Me. (area southeast of Auburn; mixed hardwood 40%, mixed conifers 20%, swamps 10%, fields 10%, pastures 10%, cut-over woodland 5%, river 5%).—Jan. 2; [hours not stated—Ed.]. Partly cloudy; temp. 38° to 44°; wind NW, 10-15 m.p.h.; ground bare after 4 days of heavy rain. Observers together, on foot. Total hours, 7; total miles, 14. Ruffed grouse, 11; herring gull, 75; hairy woodpecker, 4; downy woodpecker, 13; blue jay, 7; Am. crow, 2; black-capped chickadee, 80; white-breasted nuthatch, 5; red-breasted nuthatch, 5; brown creeper, 3; robin, 1; golden-crowned kinglet, 13; starling, 10; English sparrow, 15; evening grosbeak, 150 (at feeder); pine grosbeak, 2; pine siskin, 7; Am. goldfinch, 3; slate-colored junco, 5; tree sparrow, 72; white-throated sparrow, 1; song sparrow, 2. **Total,** 22 species; 486 individuals. (Seen during the week: Am. merganser, 13; ring-necked pheasant, 4; northern shrike, 1; crossbill (sp.), 4.)—Douglass Morse, Minot Morse, Jr.

18. Brunswick, Me. (center of town to tips of Bailey's Island and Merepoint; town suburbs 5%, open farmland 20%, deciduous and coniferous woodlots 35%, salt-water shores 40%).—Jan. 2; 6:45 a.m. to 3:45 p.m. Clear; temp. 34°; wind NW, 8 m.p.h.; ground completely clear of snow; all bays and inlets open. Six observers together. Total hours, 50 (28 on foot, 22 by car); total miles, 80 (70 by car, 10 on foot). Common loon, 3; horned grebe, 1; European cormorant, 1; double-crested cormorant, 3 (A.O.G.); mallard, 1; black duck, 310; canvas-back, 2; scaup duck (sp.), 441; Am. golden-eye, 1475; old-squaw, 4; Am. eider, 20; red-breasted merganser, 26; red-tailed hawk, 1; ring-necked pheasant, 1; great black-backed gull, 6; herring gull, 272; short-eared owl, 1; pileated woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 4; blue jay, 7; Am. crow, 63; black-capped chickadee, 22; red-breasted nuthatch, 5; golden-crowned kinglet, 7; starling, 20; myrtle warbler, 4; English sparrow, 18; white-winged crossbill, 2; slate-colored junco, 12; tree sparrow, 3. **Total,** 31 species; 2737 individuals. Seen in area Dec. 26: white-winged scoter, 1; rough-legged hawk, 2; dovekie, 16; northern shrike, 1; evening grosbeak, 2.)—Mr. and Mrs. E. F. Dana, Nathan Dane II, A. O. Gross, Mr. and Mrs. F. B. Whitman.

19. Ogunquit to Cape Porpoise, Me. (coast rocky in places, mostly sand beach or salt marsh; inland country open, with some spruce, pitch pine, and scrub maple).—Dec. 26; [hours not stated.—Ed.]. Clear; temp. 2° to 15°; wind NW, 19-24 m.p.h.; ground bare. Three observers together. Total hours, 8½; total miles, about 30, mainly in car. Common loon, 5; horned grebe, 5; pied-billed grebe, 1 (in Branch Creek, the boundary between Wells and Kennebunk); mallard, 1 ♂; black duck, 62; Am. golden-eye, 200 (est.); Barrow's golden-eye, 1 ♂ (in Wells for third consecutive winter); buffle-head, 2 (O.M.R.); old-squaw, 250 (est.); Am. eider, 6; white-winged scoter, 19; surf scoter, 33; Am. scoter, 3; scoter (sp.), 25-30; red-breasted merganser, 26; killdeer, 2 (on Drake Island in Wells); great black-backed gull, 5; herring gull, 300 (est.); horned lark (northern), 14; blue jay, 10; Am. crow, 37; black-capped chickadee, 28; red-breasted nuthatch, 2; starling, 320 (est.); myrtle warbler, 12; English sparrow, 5; pine siskin, 6; tree sparrow, 11. **Total,** 27 species; about 1400 individuals. (Lowest counts ever made by Taber on comparable dates, because of unfavorable tide and automobile trouble.)—Robert Treat Paine III, Oscar M. Root, Wendell Taber.

20. Dummer and Stark (Coos County), N. H. (Canadian forest and open fields).—Dec. 28; 8 a.m. to 3 p.m. Cloudy, or snowing lightly; temp. 20° to 25°; ground covered with 5-in. snow. Total miles, 10 (on foot). Ruffed grouse, 1; hairy woodpecker, 2; black-capped chickadee, 36; brown-capped chickadee, 1; golden-crowned kinglet, 17; evening grosbeak, 25; Am. goldfinch, 5; white-winged crossbill, 2. **Total,** 8 species; 89 individuals.—Stuart K. Harris.

21. Bennington, Vt. (Same area as covered for many years; Everett orchard, woods on east slope of Mt. Anthony, Bennington village and fields outside; apple orchard 10%, deciduous woods 15%, open fields and bushy swamps 50%, village and feeding stations 25%).—Dec. 26; 8 a.m. to 4:30 p.m. Clear; temp. 6° to 12°; wind NW, 10-12 m.p.h. at start, diminishing to 4-5 at end; ground covered with 2-4-in. snow. Eleven observers in 5 parties (2 afield, 3 at feeding stations). Total miles, 38 (14 on foot, 24 in auto). Cooper's hawk, 1; sparrow hawk, 1; ring-necked pheasant, 1; hairy woodpecker, 1; downy woodpecker, 5; blue jay, 11; Am. crow, 38; black-capped chickadee, 16; white-breasted nuthatch, 6; robin, 1; golden-crowned kinglet, 3; starling, 425 (est.); English sparrow, 250 (est.); Am. goldfinch, 5; slate-colored junco, 4; tree sparrow,

11. **Total,** 16 species; about 779 individuals. (Seen Dec. 24; brown creeper, 1; Dec. 28: barred owl, 1.) —Dorothy and Hettie Barrow, Erna Camradt, Thomas Foster, Mrs. Stella Higgins, Mrs. Margery Ludlow, Howard Nash, Dr. and Mrs. Lucretius H. Ross, Mr. and Mrs. R. R. Smith.

22. Burlington, Vt. (city, including waterfront on L. Champlain, to Colchester Pt., 7 miles northwest, and south along railroad to mouth of Winooski River; residential area and outskirts 35%, farm area, fields, pig-pens (garbage) 5%, sandy shore and dunes 25%, sedge, alder, and frozen swamp woods 35%).—Jan. 2; 8:30 a.m. to 4:30 p.m. Cloudy; temp. 26° to 29.3° to 28°; wind calm (a.m.) to W (10 m.p.h.) to N (5 m.p.h.) in late p.m.; ground covered with 2-3-in. fresh snow; marshes frozen, lake and river open. Three observers in 1 party and a fourth, part time, at feeder. Total hours, 7½ (on foot); total miles, 6 (on foot). Mallard, 1; black duck, 90; scaup duck (sp.), 30; Am. golden-eye, 53; Am. merganser, 5; herring gull, 300 (est.); hairy woodpecker, 1; downy woodpecker, 1; blue jay, 5; Am. crow, 53; black-capped chickadee, 25; white-breasted nuthatch, 9; brown creeper, 1; mockingbird, 2 (at same feeder; 1 seen regularly since November); robin, 1; starling, 500 (est.); English sparrow, 70; snow bunting, 150 (est.). **Total,** 18 species; about 1298 individuals. (Seen in area during week: tree sparrow, 1.)—M. Kingsbury, Marian Smith, Elizabeth Ball, Anna Reynolds.

23. Middlebury, Vt. (same route as last year; village suburbs 1%, open farmland 40%, mixed hardwood and coniferous second-growth 59%).—Jan. 2; 8 a.m. to 3 p.m. Cloudy; moderate to light snow ending at 11 a.m.; temp. 25° to 32°; wind SW, 1-7 m.p.h.; ground covered with 5-in. snow; severe ice-storm, Dec. 30. Total miles, 7 (on foot). Ruffed grouse, 1; hairy woodpecker, 2; black-capped chickadee, 21; white-breasted nuthatch, 1; starling, 10. **Total,** 5 species; 35 individuals.—A. M. Decker.

24. Southeastern Vermont. (Connecticut River from Vernon to Brattleboro; woods and fields from Brattleboro to southeastern Newfane twp.; open farmland 20%, mixed woodland 60%, river shoreline and marshes 20%).—Jan. 2; dawn to dusk. Cloudy; temp. 24° to 35°; wind W, about 15 m.p.h.; ground bare; river open. Three observers in 2 parties. Total party-hours, 12; total party-miles, 40 (35 by car, 5 on foot). Am. golden-eye, 45; Am. merganser, 20; ruffed grouse, 1; great black-backed gull, 2; herring gull, 16; hairy woodpecker, 1; downy woodpecker, 2; Am. crow, 6; black-capped chickadee, 20; white-breasted nuthatch, 1; starling, 8; English sparrow, 12. **Total,** 12 species; 134 individuals. (Seen in area Dec. 19: black duck, 20; mallard, 2; ruddy duck, 2; pintail, 23 males. The adult black-backed gull, a great rarity, was first noted on Dec. 31 and was accompanied by an immature on Jan. 2.)—S. O. Sears, R. H. MacArthur, J. W. MacArthur, Sr.

25. Wells River, Vt. (north, west, and south of town, including portions of the Connecticut and Wells River valleys at altitudes ranging from 400 to 1200 ft.; mixed woodland 60%, open farmland 40%. Two miles beside open water of Connecticut River).—Dec. 28; 9:30 a.m. to 5 p.m. with added time at dawn in owl habitat. Mostly cloudy; temp. 24° to 37° to 32°; wind S in a.m., NW in p.m., 1-5 m.p.h.; ground covered with 1-2-in. powdery snow; much open water. Total miles, 10 (on foot). Am. golden-eye, 55; Am. merganser, 4; ruffed grouse, 14; barred owl, 1; blue jay, 4; Am. crow, 1; black-capped chickadee, 45 (7 flocks); red-breasted nuthatch, 1; brown creeper, 1; golden-crowned kinglet, 5; tree sparrow, 7. **Total,** 11 species; 138 individuals. (Seen in area Dec. 25; robin, 1; Dec. 18; white-breasted nuthatch, 1; Dec. 15: evening grosbeak, 12; Dec. 14: snow bunting, 2.)—Wendell P. Smith.

26. Belmont and Fresh Pond (Cambridge), Mass. (entire Town of Belmont plus adjacent Fresh Pond and Fresh Pond marshes; same as 14 previous years; greatest diameter 4 miles; deciduous woodland 35%, open meadow 20%, coniferous woodland 10%, ponds 5%, residential 30%).—Dec. 29; 4 a.m. to 4:30 p.m. Overcast in a.m., very light rain in p.m.; temp. 25° to 52°; wind SSW to SE, 3-5 m.p.h.; 2-3-in. old snow on ground; ponds almost completely frozen. Ten observers, mostly working separately. Total hours, 28; total miles, 28 (afoot). Canada goose, 12 (flying over); mallard, 25 (flying over); black duck, 12 (standing on ice); wood duck, 1 (flying over); Am. golden-eye, 2; red-tailed hawk, 1; red-shouldered hawk, 1; sparrow hawk, 8; ring-necked pheasant, 22; Am. coot, 2 (standing on ice); great black-backed gull, 8; herring gull, 1760; screech owl, 2; long-eared owl, 1; short-eared owl, 1; yellow-shafted flicker, 5; hairy woodpecker, 1; downy woodpecker, 12; blue jay, 27; Am. crow, 48; black-capped chickadee, 76; white-breasted nuthatch, 9; brown creeper, 3; catbird, 2 (first winter records since 1892—Mrs. F.D., R.S.); golden-crowned kinglet, 4; cedar waxing, 72 (1 flock); starling, 587; English sparrow, 80; Am. goldfinch, 4; Savannah sparrow, 1 (second winter record—F.T.E., K.C.E.); slate-colored junco, 101; tree sparrow, 180; white-throated sparrow, 10; swamp sparrow, 1; song sparrow, 19. **Total,** 35 species; 3100 individuals.—Mr. and Mrs. Harold I. Brown, Mrs. Francis Davis, George A. Drew, Frances T. Elkins, Kimball C. Elkins, Donald Heyneman, Mr. and Mrs. Samuel D. Robbins, Robert Smolker (Belmont Bird Club).

27. Cape Ann, Mass. (Beverly, Essex, Manchester, Gloucester, Rockport, Ipswich beach, as in previous years).—Dec. 26; dawn to sunset. Clear; temp. 6° to 20°; wind NW, 19-24 m.p.h.; ground largely covered with 2-6-in. crusted snow; practically all ponds and marshes, as well as harbor-edges, frozen. Twenty-three observers in 6 parties. Total party-hours, 60; total party-miles, 250 (225 by car, 25 on foot). Common loon, 22; red-throated loon, 7; Holboell's grebe, 3; horned grebe, 21; gannet, 4; European cormorant, 46; Canada goose, 2; mallard, 1; black duck, 96; greater scaup duck, 1; Am. golden-eye, 359; Barrow's golden-eye, 1 (Burrell and 3 other observers); buffle-head, 201; old-squaw, 61; harlequin duck, 1; Am. eider, 3; white-winged scoter, 47; surf scoter, 12; Am. scoter, 4; hooded merganser, 1; red-breasted merganser, 175; goshawk, 1; purple sandpiper, 66; glaucous gull, 1; Iceland gull, 4 (Iceland, 3; Kumlien's, 1); great black-backed gull, 110; herring gull, 2310; ring-billed gull, 1; common kittiwake, 6; dovekie, 7; black guillemot, 4; mourning dove, 1; screech owl, 1; saw-whet owl, 1 (found dead); belted kingfisher, 1; yellow-shafted flicker, 7; hairy woodpecker, 5; downy woodpecker, 8; horned lark, 20; blue jay, 43; Am. crow, 88; black-capped chickadee, 123; white-breasted nuthatch, 6; red-breasted nuthatch, 8; brown creeper, 3; golden-crowned kinglet, 28; Am. pipit, 3 (Harrington and 4 others, at close range); cedar waxwing, 50; northern shrike, 1; starling, 2265; myrtle warbler, 201; pine warbler, 2 (Mason and 3 others); palm warbler (western), 9; yellow-breasted chat, 1 (Baird and others); English sparrow, 69; purple finch, 1; pine siskin, 60; Am. goldfinch, 58; eastern towhee, 1 (Mason); slate-colored junco, 83; Oregon junco, 1 (♂ at same feeding station as last year—Burnett); tree sparrow, 94; white-throated sparrow, 25; song sparrow, 15; snow bunting, 80. **Total,** 65 species (1 additional subspecies); 6940 individuals. (It is interesting to note that on 13 Christmas bird counts in this area (1930-39, 1946-48), 120 species have been recorded, only 27 of which were seen every year, while 25 were recorded only once.)—Joseph Bagnula, James Baird, Sally Bowker, Frances Burnett, Fred Burrell, Dorothy W. Caldwell, Martin S. Curtler, Mr. and Mrs. Henry Halberg, Winthrop Harrington, Seward Highley, Ralph Lawson, Mr. and Mrs. George Loring, Jr., Bertram Leadbeater, C. Russell Mason, Thomas O'Connell, Mrs. David Searle, Prentiss Shepherd, Benjamin Shreve, Jr., Dorothy E. Snyder, Susanne Staub, Mrs. Heyliger de Windt.

28. Cape Cod, Mass. (parts of Chatham, Brewster, Orleans, and Eastham).—Jan. 2; dawn to 1 hour after dark. Mostly overcast; temp. 28°-36°; wind NW, light to moderate; ground bare and unfrozen; a little skim ice on fresh-water pools only. Twenty-four observers in 4 parties over 4 routes of many years, omitting most of Eastham; 1 party by plane to Monomoy Point. Total party-hours, 52; total party-miles, 305 (260 by car, 30 by plane, 15 on foot). Common loon, 21; Arctic loon, 1 (ad. on pond at Eastham with a common loon; small size, slender bill, gray head and nape, remains of black throat-patch, all clearly seen by 2 parties on both Jan. 1 and 2); red-throated loon, 6; Holboell's grebe, 3; horned grebe, 10; pied-billed grebe, 22 (remarkable count); gannet, 9; European cormorant, 4; great blue heron, 5; black-crowned night heron, 3; Canada goose, 3135; brant, 610; mallard, 7; black duck, 2550; gadwall, 1 ♂ (in same marsh since late Nov.); baldpate, 30; pintail, 1; green-winged teal, 7; redhead, 4; ring-necked duck, 27; canvas-back, 5; greater scaup duck, 295; lesser scaup duck, 260; Am. golden-eye, 1045; Barrow's golden-eye, 1 ♂ (rare straggler to Cape Cod); buffle-head, 333 (largest count ever); old-squaw, 530; harlequin duck, 2; Am. eider, 3800; king eider, 3 (2 ♂, 1 ♀?); white-winged scoter, 299; surf scoter, 16; Am. scoter, 39; ruddy duck, 116; hooded merganer, 4; Am. merganser, 220; red-breasted merganser, 171; sharp-shinned hawk, 3; Cooper's hawk; 1; red-tailed hawk, 2; rough-legged hawk, 2; bald eagle, 4; marsh hawk, 7; gyrfalcon, 1 (superb, unmistakable white-phased adult at Monomoy Point, pursuing a mallard over the pond, was frightened by the observers, turned and flew north; Karplus properly impressed by the slow wing-beats); sparrow hawk, 5; ruffed grouse, 1; bob-white, 9; yellow rail, 1 (*seen* in usual Brewster meadow—H.M.P.); Am. coot, 53; black-bellied plover, 1; Wilson's snipe, 1; greater yellow-legs, 1 (just north of count area but migrating south); red-backed sandpiper, 1150 (remarkable count); sanderling, 1; glaucous gull, 2; great black-backed gull, 188; herring gull, 3350; ring-billed gull, 240; Bonaparte's gull, 9; razor-billed auk, 1; dovekie, 1 (dead); horned owl, 4; long-eared owl, 2; short-eared owl, 1; belted kingfisher, 1; yellow-shafted flicker, 56; hairy woodpecker, 2; downy woodpecker, 9; horned lark, 183; blue jay, 57; Am. crow, 335; black-capped chickadee, 510; red-breasted nuthatch, 5; brown creeper, 6; long-billed marsh wren, 1; mockingbird, 1 (around Orleans since late October); robin, 183 (remarkable count); hermit thrush, 3; eastern bluebird, 165 (remarkable count); golden-crowned kinglet, 32; ruby-crowned kinglet, 2; Am. pipit, 1 (at Monomoy Point—M.K.); cedar waxwing, 114 (remarkable count); northern shrike, 1; starling, 870; orange-crowned warbler, 2 (in Orleans; 5 at Chatham on previous day; unprecedented); myrtle warble, 1345; pine warbler, 12 (unprecedented); palm warbler (western), 5; English sparrow, 250; eastern meadowlark, 36; Baltimore oriole, 1 (eating bread-crumbs on a lawn at Orleans with English sparrows); purple finch, 14; pine siskin, 355 (unprecedented); Am. goldfinch, 670 (unprecedented invasion); Ipswich sparrow, 2; Savannah sparrow, 3; sharp-tailed sparrow, 1; vesper sparrow,

1; slate-colored junco, 88; tree sparrow, 190; field sparrow, 5; white-throated sparrow, 14; swamp sparrow, 14 (unprecedented count); song sparrow, 41; Lapland longspur, 5; snow bunting, 6. **Total,** 107 species; 24,233 individuals. (Scouting parties afield on the 3 preceding and 2 following days saw in the area: whistling swan, snow goose, white-fronted goose, goshawk, mourning dove, screech owl, saw-whet owl, Say's phoebe, western tanager, eastern towhee. The unprecedented variety and abundance of birds seems due to a November and December of record-breaking warmth. A mildly cold spell, Dec. 25-26, brought a great rush of belated birds, which were then held by a 3-day southeast gale. From Dec. 31 to Jan. 4, the fall migrants rapidly decreased, while black ducks, golden-eyes, black-backed gulls, and tree sparrows were much commoner on Jan. 4 than on Jan. 2.)—Donald C. Alexander, Virginia Armstrong, Jack Arnett, Jean Burch, Charles M. Crain, W. B. Drury, David L. Emerson, Ludlow Griscom, Martin Karplus, Hugh MacMahon, C. Russell Mason, Mr. and Mrs. Terris Moore, Katherine Moore, Marjorie Morando, Henry M. Parker, Oscar M. Root, Douglas B. Sands, Louise Slater, Dorothy Snyder, Katherine Tousey, Richard Vahan, William Walker, Betsy Wood. We are greatly indebted to Mr. Moore for using his private plane.

29. Cohasset and North Scituate, Mass. (seacoast and adjacent fields).—Dec. 25; 8:30 a.m. to sunset. Fair to partly cloudy; temp. 13° to 22°; wind N, almost calm; ground covered with 2-in. snow. Observers together. Total miles, 14 (4 on foot, 10 in car). European cormorant, 14; black duck, 32; scaup duck (sp.), 128; Am. golden-eye, 20; buffle-head, 12; white-winged scoter, 6; red-breasted merganser, 13; Am. coot, 7; great black-backed gull, 5; herring gull, 65; yellow-shafted flicker, 3; downy woodpecker, 1; blue jay, 9; Am. crow, 16; black-capped chickadee, 14; starling, 65; English sparrow, 6; Am. goldfinch, 15; slate-colored junco, 18; tree sparrow, 9; song sparrow, 1. **Total,** 21 species; 459 individuals.—Laurence B. Fletcher, Winsor M. Tyler.

30. Great Barrington, Mass. (central and west side of town, south through Sheffield to Ashley Falls and west to include Egremont; residential area 10%, hemlock and pine woods 10%, hedges and open country 80%).—Dec. 26; 8 a.m. to 4:30 p.m. Fair; temp. 12° to 20°; brisk NW wind; ground covered with 4-6-in. snow; water frozen except for areas where current was swift. Eleven observers, all but one at or near their homes. Total miles, 4 (on foot). Mallard, 2; black duck, 2; rufied grouse, 1; hairy woodpecker, 1; downy woodpecker, 17; blue jay, 5; Am. crow, 28; black-capped chickadee, 69; white-breasted nuthatch, 23; brown creeper, 5; eastern bluebird, 1; golden-crowned kinglet, 5; cedar waxwing, 3; starling, 8; English sparrow, 36; slate-colored junco, 10; tree sparrow, 51; song sparrow, 1. **Total,** 18 species; 268 individuals.—Jessie Buck, William J. Cox, Mrs. A. P. Culver, John M. Francis, Mrs. M. B. Heady, Mrs. John B. Hull, Jr., Mrs. R. J. Longdyke, Mr. and Mrs. William B. Nisbet, Jr., Eugene H. Varney, Mrs. Donald Worthington (Hoffmann Bird Club).

31. Holyoke, Mass. (Mt. Tom to Connecticut line; same area as in past counts, excepting certain low-lying sections flooded by the Connecticut River).—Jan. 2; 7 a.m. to 5 p.m. Overcast; temp. 31° to 32°; wind NW, rising to 20 m.p.h. during day; frozen ground lightly dusted with snow; ponds frozen; rivers and streams open, receding from flood peak of Jan. 1. Two observers afield together; 2 others at home feeding-trays. Total hours, 10; total miles, 65 (60 by car, 5 on foot). Black duck, 126; green-winged teal, 1; wood duck, 1; Am. merganser, 27; sparrow hawk, 3; ring-necked pheasant, 1; herring gull, 40; hairy woodpecker, 1; downy woodpecker, 5; horned lark, 6; blue jay, 23; Am. crow, 475±; black-capped chickadee, 70; white-breasted nuthatch, 7; red-breasted nuthatch, 2; brown creeper, 2; catbird, 1; golden-crowned kinglet, 5; northern shrike, 1; starling, 1000±; English sparrow, 200+; Am. goldfinch, 2; slate-colored junco, 35; tree sparrow, 110; white-throated sparrow, 1. **Total,** 26 species; about 2156 individuals. The teal and wood duck, seen with the tame mallards at Forest Park, Springfield, are presumed to be the same individuals that wintered there in 1947-48.—Aaron M. Bagg, Edward P. Bagg, Priscilla W. Bagg, George Hamel.

32. Lynn, Mass. (area with Lynn as center, and including Saugus, Nahant, Salem, Beverly, Danvers, Peabody, Lynnfield, and Wakefield; sandy beaches rocky shores, mixed woodland, farms, suburbs and villages).—Jan. 2; 9 a.m. to 4 p.m. Mostly overcast; temp. 30° to 40°; wind NW, 5-15 m.p.h.; ground bare; Ipswich River open; ponds frozen. Twelve observers in 3 parties. Total hours, 84; total miles, 121 (110 by auto, 11 on foot). Common loon, 16; red-throated loon, 6; Holboell's grebe, 2; horned grebe, 11; European cormorant, 78; mallard, 2; black duck, 2140; greater scaup duck, 209; Am. golden-eye, 530; Barrow's golden-eye, 1 (at foot of Saunders St., Beverly—A.A., M.A., M.E., R.E.); buffle-head, 235; old-squaw, 16; white-winged scoter, 86; surf scoter, 3; Am. scoter, 46; Am. merganser, 4; red-breasted merganser, 84; red-tailed hawk, 1; rough-legged hawk, 1; sparrow hawk, 9; ring-necked pheasant, 1; purple sandpiper, 32; Iceland gull (Kumlien's), 1; great black-backed gull, 89; herring gull, 3500; rock-dove, 48 (breeding on cliffs at Nahant); mourning dove, 1; screech owl,

1; yellow-shafted flicker, 2; hairy woodpecker, 3; downy woodpecker, 9; blue jay, 26; Am. crow, 60; black-capped chickadee, 34; white-breasted nuthatch, 5; red-breasted nuthatch, 1; brown creeper, 3; golden-crowned kinglet, 5; starling, 750; myrtle warbler, 4; pine warbler, 1 (G.M.S.); western palm warbler, 1 (G.M.S.); yellow-breasted chat, 1 (regular at a Danvers feeder); English sparrow, 170; brown-headed cowbird, 1; common redpoll, 30; pine siskin, 1; Am. goldfinch, 2; slate-colored junco, 110; tree sparrow, 8; song sparrow, 8; snow bunting, 1. **Total,** 52 species; 8389 individuals.—Arthur Argue, Margaret Argue, Dorothy Caldwell, Clara De Windt, Maurice Emery, Ruth Emery, James T. Kelly, Frances Lawson, Leslie T. Little, Marius Robinson, Daisy Searle, Grace M. Snow (Brookline Bird Club).

33. Newburyport, Mass. (Plum Island and the Newburys, south to Topsfield, east to Castle Hill, Ipswich, and west to Groveland and the Merrimac River; 10th year in same territory).—Dec. 26; dawn to 5:30 p.m. Clear; temp. 2° to 15°; wind NW, 19-24 m.p.h.; ground covered with 2-6-in. crusted snow; marshes and ponds frozen. Twenty observers in 5 parties. Total party-hours, 51; total party-miles, 256 (240 by car, 16 on foot). Common loon, 12; red-throated loon, 1; Holboell's grebe, 1; horned grebe, 16; European cormorant, 3; brant, 5; mallard, 8; black duck, 1759; pintail, 2; green-winged teal, 10; greater scaup duck, 952; Am. golden-eye, 539; buffle-head, 102; old-squaw, 460; white-winged scoter, 20; surf scoter, 10; Am. scoter, 27; ruddy duck, 11; Am. merganser, 20; red-breasted merganser, 59; red-tailed hawk, 1; red-shouldered hawk, 2; rough-legged hawk, 5; bald eagle, 3; marsh hawk, 8; sparrow hawk, 4; ruffed grouse, 5; Am. coot, 8; purple sandpiper, 1; red-backed sandpiper, 5; Iceland gull (Kumlien's), 1; great black-backed gull, 10; herring gull, 856; ring-billed gull, 18; Bonaparte's gull, 115; screech owl, 1; barred owl, 1; long-eared owl, 1; short-eared owl, 1; yellow-shafted flicker, 3; hairy woodpecker, 5; downy woodpecker, 19; horned lark (northern), 53; blue jay, 96; Am. crow, 289; black-capped chickadee, 300; white-breasted nuthatch, 7; red-breasted nuthatch, 1; brown creeper, 5; robin, 4; hermit thrush, 2; eastern bluebird, 5; golden-crowned kinglet, 12; starling, 2756; myrtle warbler, 89; English sparrow, 104; purple finch, 1; pine siskin, 5; Am. goldfinch, 54; Savannah sparrow, 1; slate-colored junco, 220; tree sparrow, 167; white-throated sparrow, 7; fox sparrow, 1; song sparrow, 7; Lapland longspur, 21; snow bunting, 131. **Total,** 67 species; about 9430 individuals. (It is worth noting that the combined species list for the Cape Ann and Newburyport counts taken on the same day and covering contiguous areas was 90, and that 145 species were reported for eastern Massachusetts within 15 miles of the coast during the 1948-49 period.)—D. C. Alexander, Mr. and Mrs. Arthur Argue, Elisha Atkins, Lois Batchelder, Charles Crain, Mrs. J. Frank DuBois, Frances Elkins, Mr. and Mrs. Maurice Emery, Elmer Foye, Ludlow Griscom, Richard Hinchman, Mrs. Harlan Kelsey, Dr. and Mrs. Stephen Maddock, Henry Parker, Charles Preston, Mrs. Lionel Sheppard, Cora Wellman.

34. Northampton, Mass. (same circle as in last 14 years; most of the time spent near houses or along edges of fields, but some in pine-hemlock woods).—Dec. 26. Clear; temp. 10° to 16°; wind N, 10-5 m.p.h.; ground covered with 1½-in. snow; water frozen except portions of the Connecticut River. Fifty-seven observers, 31 at or near their homes, 26 afield in 16 parties, 8 with cars, 8 on foot. Mallard, 2; black duck, 40; Am. merganser, 1; red-tailed hawk, 1; red-shouldered hawk, 1; sparrow hawk, 3; ruffed grouse, 9; ring-necked pheasant, 17; horned owl, 3; barred owl, 1; hairy woodpecker, 13; downy woodpecker, 51; blue jay, 96; Am. crow, 228; black-capped chickadee, 333; white-breasted nuthatch, 65; red-breasted nuthatch, 1; brown creeper, 12; mockingbird, 1; catbird, 1 (another was last seen Dec. 19); hermit thrush, 1 (another, miles away, Dec. 27); eastern bluebird, 1; golden-crowned kinglet, 18; starling, 640 (est.); English sparrow, 530 (est.); Bullock's oriole, 1 (♀ at an Easthampton feeder since November, afterwards studied by S. A. Eliot, James Baird and others); evening grosbeak, 13; purple finch, 1; common redpoll, 10; Am. goldfinch, 36; slate-colored junco, 185; tree sparrow, 381; chipping sparrow, 1 (at an Amherst feeder since Dec. 1); fox sparrow, 1; swamp sparrow, 1; song sparrow, 16. **Total,** 36 species; about 2725 individuals. (Seen Dec. 18, herring gull, 1; eastern meadowlark, 3; Dec. 19, pileated woodpecker, 1; Dec. 22, cedar waxwing, 2; Dec. 23, white-throated sparrow, 1; Dec. 25, sharp-shinned hawk, 1; Dec. 27, yellow-shafted flicker, 1; Jan. 2, *varied thrush*, closely studied and unmistakably described by Mrs. G. R. Taylor; compare Say's phoebe and western tanager on Cape Cod count.)—Mrs. Paul Adams, Mrs. Howard Alcorn, Mrs. J. W. Anderson, John L. Bagg, Mrs. Malcolm Bagg, Prof. and Mrs. Theodore Baird, L. M. Bartlett, Elizabeth Boyd, Mrs. R. S. Bracewell, Jerry Brown, J. E. Cavanagh, J. E. Cavanagh, Jr., R. M. Clark, R. L. Coffin, D. H. Crompton, Ruth Crowley, Mrs. M. A. Dickinson, Jr., Susan Doleman, Anne Eliot, Mr. and Mrs. R. W. Fessenden, Dwight and John Graves, Cora B. Grover, J. L. Huntington, Mr. and Mrs. J. T. Kentfield, Mrs. Harry Kidger, A. S. Kinney, Donald LaCroix, Mrs. Philip Linnell, Mrs. Dudley Lloyd, Mrs. John Miller, Esther J. Pollard, Mary T. Pomeroy, Gordon Potter, Mr. and Mrs. D. A. Riedel, Anne Robinson, F. A. Saunders, Marie Schurr, Jane Ann Sessions, Mrs. H. W. Smart, R. W. Smart, Mr. and Mrs. E. C. Staples, Mrs. H. L. Sweetman, Mrs. G. R. Taylor, Mrs. C. L.

Thayer, P. S. Thayer, Wallace Torrey, Mrs. George Tyler, Mrs. W. S. Welles, P. L. Wheelock, Mrs. Paul Williams, Leonard G. Worley.

35. Pittsfield, Mass. (south and west of city; woods 70%, fields 30%).—Dec. 26; 8 a.m. to 4 p.m. Clear; temp. 3° to 6°; wind W, light to moderate; ground covered with 4-in. light snow; all still water frozen. Four observers together in a.m., 3 in p.m.; 7 more at 01 near their homes. Total party-hours, 40½; total party-miles, 9 (on foot). Pileated woodpecker, 1; hairy woodpecker, 2; downy woodpecker, 5; blue jay, 6; Am. crow, 8; black-capped chickadee, 45; brown creeper, 2; winter wren, 1; robin, 1; golden-crowned kinglet, 4; starling, 103; English sparrow, 31; tree sparrow, 39. **Total,** 13 species; 248+ individuals. (The wren, rare here in winter, was the second seen within a few days. Pine grosbeaks and redpolls have been missing, and evening grosbeaks very scarce, though less scarce than last year.)—Mr. and Mrs. Elmore J. Fitz, Frances Gillotti, Daniel Gleize, Paul Green, Mrs. Bartlett Hendricks, Evan Hendricks, Mr. and Mrs. Saul Minneci, Mr. and Mrs. Leonard E. Sweitzer, Mrs. John A. Vreeland, Jr. (Hoffmann Bird Club).

36. Quincy, Mass. (Squantum, Moon Island, Wollaston, Braintree, Hingham, Hull; shore 60%, salt marsh 10%, open woods and park 25%, residential 5%).—Dec. 26; 7 a.m. to 5 p.m. Clear; temp. 8° to 18°; wind NNW, 35 m.p.h., dropping to 20 m.p.h.; ground frozen, fresh water frozen, salt bay frozen at edges. Seven observers in 2 parties. Total party-hours, 16; total party-miles, 68 (60 by car, 8 on foot). Common loon, 1; European cormorant, 78; Canada goose, 8; black duck, 128; greater scaup duck, 6000 (est.); Am. golden-eye, 511 (91+420 est.); buffle-head, 64; old-squaw, 21; white-winged scoter, 28; surf scoter, 7; red-breasted merganser, 110; sparrow hawk, 4; purple sandpiper, 39; Iceland gull, 1; great black-backed gull, 15; herring gull, 3490 (1990+1500 est.); laughing gull, 1 (R.F., R.A.); yellow-shafted flicker, 4; downy woodpecker, 3; blue jay, 7; Am. crow, 16; black-capped chickadee, 39; white-breasted nuthatch, 1; brown creeper, 2; starling, 15,000 (est., at roost); myrtle warbler, 1; English sparrow, 209; Am. goldfinch, 1; slate-colored junco, 74; tree sparrow, 10; song sparrow, 3; snow bunting, 1. **Total,** 32 species; about 25,907 individuals.)—Robert Atkinson, Rollin Bailey, Robert Fox, Sibley Higginbotham, Ruth Higginbotham, Donald West, George Wilson.

37. Sharon, Mass. (entirely within the 200 acres of Moose Hill Sanctuary; mature mixed woodland 70%, woodland borders containing introduced plantings 30%).—Jan. 2; dawn to dusk. Partially overcast; temp. 30° to 32°; wind NW, 13-18 m.p.h.; ground virtually free from snow. Three observers in 2 parties. Total miles, 8 (on foot). Ruffed grouse, 1; mourning dove, 4; hairy woodpecker, 1; downy woodpecker, 3; blue jay, 6; Am. crow, 12; black-capped chickadee, 38; white-breasted nuthatch, 2; catbird, 1 (a wintering bird which has been present up until now); golden-crowned kinglet, 5; northern shrike, 1; English sparrow, 5; Am. goldfinch, 4; slate-colored junco, 45; Oregon junco, 1 (sharply defined markings, adult ♂, seen previously on several occasions); tree sparrow, 26; song sparrow, 1. **Total,** 17 species; 156 individuals.—David Perry, Andrew Ward, John V. Dennis.

38. Ware, Mass. (centre of town east to Hardwick; south on Ware River to Palmer Airport; north along Muddy Brook to Hardwick Pond; lower and middle Quabbin Reservoir and watershed; town gardens 5%, open farmland 20%, deciduous woodland 5%, pine woodland 10%, marsh 20%, reservoirs and watershed 40%).—Dec. 26; 8 a.m. to 4 p.m. Clear; temp. –5° to 20°; wind NW, 25-38 m.p.h.; ground covered with 2-4-in. partly crusted snow; all water frozen except rapids of Ware River and exposed areas of Quabbin Reservoir. Eighteen observers in 7 parties. Total hours, 40 (34 on foot, 6 by car); total miles, 68 (55 on foot, 13 by car). Black duck, 204; Am. merganser, 43; bald eagle, 8; ruffed grouse, 8; ring-necked pheasant, 1; herring gull, 6; belted kingfisher, 2; hairy woodpecker, 2; downy woodpecker, 5; blue jay, 20; Am. crow, 66; black-capped chickadee, 135; white-breasted nuthatch, 8; brown creeper, 5; golden-crowned kinglet, 36; northern shrike, 1; starling, 534; English sparrow, 175; evening grosbeak, 4; slate-colored junco, 49; tree sparrow, 228; song sparrow, 1. **Total,** 22 species; 1541 individuals. (Seen in area Dec. 27, red-tailed hawk; Dec. 30, screech owl; Jan. 1, Am. goldfinch.)—L. G. Albertine, M. E. Albertine, S. T. Berube, W. H. Berube, L. A. Campbell, L. S. Campbell, D. D. Conkey, J. H. Conkey, N. Descoteaux, J. Madigan, L. Millier, J. F. Nields, Jr., M. B. Neilds, D. K. Sampson, E. Sampson, F. B. Shea, M. A. Shea, T. Wisnoski (Quabbin Bird Club).

39. Worcester, West Boylston, and Boylston, Mass. (pond shores 25%, fields 35%, suburban areas 25%, urban areas 15%).—Dec. 30; 8:55 a.m. to 4:35 p.m. Cloudy, and raining except for 1¼ hours in late morning; temp. 52°; wind SE, 3 m.p.h.; ground 99% bare, 1% with patches of thin snow; Curtis Pond open, Wachusett Reservoir 75% open, other 3 ponds frozen with an inch of water covering the ice. Observers together. Total hours afield, 7; total miles, 80½ (78 by auto, 2½ on foot). Mallard, 19 (wing-free; introduced about 1934); black duck, 136; Am. merganser, 17; herring gull, 2; downy woodpecker, 1; blue jay, 6; Am.

crow, 9; black-capped chickadee, 7; brown creeper, 2; starling, 265; English sparrow, 13; eastern meadowlark, 2. **Total,** 12 species; 479 individuals. —Davis H. Crompton, Patrick Moriarty.

40. Island of Rhode Island, R.I. (Portsmouth, 6 sq. mi.; Middletown, 2 sq. mi.; Newport, 3 sq. mi. Atlantic Ocean, 2 sq. mi.; Narragansett Bay, 2 sq. mi.; Mount Hope Bay, 3 sq. mi.; Sakonnet River, 9 sq. mi.; ocean 5%, estuaries 55%, reservoirs 6%, marsh 3%, deciduous woodlots 2%, evergreens and borders 6%, fields, pasture, and farmland 18%, residential areas 5%).—Dec. 30; 6:35 a.m. to 9 p.m. Cloudy, rain one hour, cloudy; temp. 50° to 55°; wind SE, 12-38 m.p.h. (small craft warning); ground bare; ponds partly frozen. (Wind prevented work on open water and interfered with listening for owls.) Three observers in 3 parties. Total hours, 20 (11 on foot, 3 in marine patrol boat, 6 in car, including 3 at night); total miles, 95 (8 on foot, 18 by boat, 79 by car including 27 at night). Common loon, 1; red-throated loon, 2; Holboell's grebe, 1; horned grebe, 12; pied-billed grebe, 1 (on salt water of sheltered cove as result of recent freezing of fresh water—H.E.C.); European cormorant, 7 (roost not visible); Canada goose, 5; mallard (feral), 1; black duck, 148; baldpate, 130; redhead, 22; canvas-back, 1 ♂ (direct comparison with redheads); greater scaup duck, 5018; Am. golden-eye, 3083; buffle-head, 39; old-squaw, 45; white-winged scoter, 41; Am. scoter, 35; ruddy duck, 10; Am. merganser, 1 ♀; red-breasted merganser, 155; sharp-shinned hawk, 1; red-tailed hawk, 2; rough-legged hawk, 1; marsh hawk, 1; sparrow hawk, 6; Am. coot, 110; purple sandpiper, 35; great black-backed gull, 140; herring gull, 2068; ring-billed gull, 2; Bonaparte's gull, 11; short-eared owl, 1 (heard by E.W. and seen flying in car headlights where located on 28th in daylight, by H.C.); yellow-shafted flicker, 2; horned lark (northern), 15; blue jay, 2; Am. crow, 94; black-capped chickadee, 1; robin, 1; starling, 508; myrtle warbler, 6; English sparrow, 29; eastern meadowlark, 17; brown-headed cowbird, 4; pine siskin, 4; Am. goldfinch, 91; slate-colored junco, 4; tree sparrow, 8; field sparrow, 1; song sparrow, 23. **Total,** 50 species; 11,949 individuals. (Seen in area Dec. 24, Am. eider, 2; Am. pipit, 4; Dec. 28, ring-necked pheasant, 1; Am. pipit, 1; vesper sparrow, flock of 8; swamp sparrow, 1; Dec. 29, mockingbird, 1.—Henry E. Childs, Charlotte Steele, Elmer Worthley (Rhode Island Audubon Society).

41. Providence, R. I. (east to Barrington, south to Warwick Neck on Narragansett Bay).—Jan. 2; 7:15 a.m. to 4:30 p.m. Cloudy; temp. 17° to 22°; wind WNW, 13-18 m.p.h.; ground bare; ponds partly frozen. Eight observers in 3 parties. Total hours, 23; total miles, 58 (49 by car, 9 on foot). Horned grebe, 1; black-crowned night heron, 8, mallard, 11; black duck, 1020; baldpate, 502; pintail, 3; green-winged teal, 1; scaup duck (sp.), 7500 (est.); Am. golden-eye, 548; buffle-head, 37; old-squaw, 4; white-winged scoter, 40; surf scoter, 20; Am. scoter, 37; ruddy duck, 75; Am. merganser, 335; red-breasted merganser, 15; red-tailed hawk, 1; peregrine falcon, 1; sparrow hawk, 2; ring-necked pheasant, 3; great black-backed gull, 15; herring gull, 965; Bonaparte's gull, 1; yellow-shafted flicker, 18; downy woodpecker, 5; blue jay, 74; Am. crow, 168; black-capped chickadee, 32; white-breasted nuthatch, 1; brown creeper, 3; robin, 1; golden-crowned kinglet, 1; cedar waxwing, 7; starling, 750; myrtle warbler, 32; English sparrow, 172; pine siskin, 12; Am. goldfinch, 60; slate-colored junco, 59; tree sparrow, 40; field sparrow, 2; white-throated sparrow, 1; song sparrow, 12. **Total,** 44 species; about 12,601 individuals. (Seen on Patience Island, in Narragansett Bay, outside 15-mile circle: rough-legged hawk, 1; marsh hawk, 2.)—Henry E. Childs, Roland C. Clement, William B. Dean, Grace Donnelly, Frances Perry, Elizabeth Weeks, Charles Wood, Carlos G. Wright.

42. South Kingstown and Narragansett, R.I. (deciduous woods 20%, brushy fields 30%, open fields 20%, marshes and shore 30%).—**Dec. 27; 7** a.m. to 4:30 p.m. Partly cloudy; temp. 2° at start, max. 30°; wind WNW to SW, 1-25 m.p.h.; ground covered with 1-6-in. granular snow; fresh and brackish ponds frozen. Thirteen observers in 3 cars traveling as 1 party with short sallies on foot; 4 observers about feeding stations. Total party-hours, 12 (8 on foot, 4 in car); total miles, 78 (8 on foot, 70 in car). Common loon, 8; red-throated loon, 2; horned grebe, 31; gannet, 4; European cormorant, 90; Canada goose, 45; mallard, 3; black duck, 500; greater scaup duck, 11; Am. golden-eye, 150; buffle-head, 6; Am. eider, 1; king eider, 2; white-winged scoter, 95; surf scoter, 2; Am. scoter, 12; ruddy duck, 3; Am. merganser, 14; red-breasted merganser, 130; Cooper's hawk, 1; red-tailed hawk, 1; rough-legged hawk, 1; bald eagle, 1; sparrow hawk, 5; ruffed grouse, 1; purple sandpiper, 46; glaucous gull, 1; great black-backed gull, 150; herring gull, 600; ring-billed gull, 25; Bonaparte's gull, 450; dovekie, 1; mourning dove, 2; yellow-shafted flicker, 4; downy woodpecker, 5; horned lark (northern), 115; blue jay, 24; Am. crow, 55; black-capped chickadee, 20; white-breasted nuthatch, 2; brown creeper, 1; catbird, 9; robin, 40; hermit thrush, 2; eastern bluebird, 6; cedar waxwing, 34; loggerhead shrike, 1; starling, 250; myrtle warbler, 20; English sparrow, 200; eastern meadowlark, 22; purple grackle, 2; brown-headed cowbird, 1; purple finch, 8; pine siskin, 6; Am. goldfinch, 7; eastern towhee, 4; Savannah sparrow, 1; vesper sparrow, 4; slate-colored junco, 60; tree sparrow, 50; field sparrow, 3; white-throated sparrow, 70; fox sparrow, 3; swamp spar-

row, 3; song sparrow, 30. **Total,** 66 species; 3456 individuals.—R. C. Clement, G. Donnelly, M. Donnelly, F. Gairloch, C. Gates, H. Gates, I. Gates, R. Gilbert, E. Hall, L. Higgins, T. Higgins, H. Hofford, R. Joy, M. Heath, D. L. Kraus, F. Perry, E. Weeks (Little Rest Bird Club).

43. Tiverton and Little Compton, R. I., and Acoaxet, Mass. (the regular semi-wooded, agricultural coastal strip).—Dec. 26; 7 a.m. to 4:30 p.m. Partly cloudy; temp. 2° at start; wind NW, 25-30 m.p.h. all day; ground covered with 6-in. crusted snow (no snow or ice until a week ago); all ponds frozen except for a few small openings. Seven observers in 2 cars, together except for foot parties. Total hours, 9 (4 on foot, 5 by car); total miles, 65 (5 on foot). Common loon, 10; red-throated loon, 2; horned grebe, 15; pied-billed grebe, 5 (all on salt water!); European cormorant, 4; mute swan, 9; mallard, 7; black duck, 90; baldpate, 225; pintail, 26; green-winged teal, 1; ring-necked duck, 1; greater scaup duck, 15; Am. golden-eye, 300+; buffle-head, 40; old-squaw, 1; Am. eider, 25; white-winged scoter, 45; surf scoter, 7; Am. scoter, 5; ruddy duck, 13; Am. merganser, 5; red-breasted merganser, 475+; red-tailed hawk, 1; rough-legged hawk, 1; marsh hawk, 3; sparrow hawk, 3; Am. coot, 160 (2 on salt water); killdeer, 3; black-bellied plover, 1; purple sandpiper, 50+; red-backed sandpiper, 200; sanderling, 20; great black-backed gull, 15; herring gull, 500+; ring-billed gull, 13; Bonaparte's gull, 180+; dovekie, 2; mourning dove, 65+; yellow-shafted flicker, 6; downy woodpecker, 1; horned lark (northern), 115; blue jay, 6; Am. crow, 260+; black-capped chickadee, 15; catbird, 1; robin, 14; eastern bluebird, 8 (1 flock); golden-crowned kinglet, 1; cedar waxwing, 4; starling, 180+; myrtle warbler, 60+; palm warbler (western), 1 (D.I.K., D.I.E.); English sparrow, 200+; eastern meadowlark, 30; red-wing, 3; brown-headed cowbird, 13; purple finch, 4; pine siskin, 22 (1 flock); Am. goldfinch, 330; eastern towhee, 1; Ipswich sparrow, 1; Savannah sparrow, 22; vesper sparrow, 20+; slate-colored junco, 14; tree sparrow, 150+; field sparrow, 1; white-throated sparrow, 20; fox sparrow, 2; swamp sparrow, 7; song sparrow, 35; snow bunting, 1. **Total,** 72 species; 4092+ individuals.—R. Bowen, B. D. Bryan, R. C. Clement, W. B. Dean, W. H. Drury, Jr., D. L. Emerson, D. L. Kraus (R. I. Ornithological Club).

44. Hartford, Conn. (area within 7½ miles of center of the city, as in previous years).—Dec. 26; dawn to dusk. Clear; temp. 3° to 20° to 5°; wind NW shifting to SW late in the evening, 14-16 m.p.h.; ground covered with 5-in. snow; all ponds frozen, but part of the Connecticut River still open. Thirty-one observers in 20 parties. Total hours, 73½; total miles, 194½ (126½ by car, 68 on foot). Mallard, 2; black duck, 51; Am. merganser, 175; sharp-shinned hawk, 1; red-shouldered hawk, 3; rough-legged hawk, 1; sparrow hawk, 6; ring-necked pheasant, 28; herring gull, 58; mourning dove, 62; screech owl, 2; horned owl, 1; barred owl, 1; long-eared owl, 1; yellow-shafted flicker, 5; hairy woodpecker, 18; downy woodpecker, 60; horned lark, 57; blue jay, 169; Am. crow, 334; black-capped chickadee, 182; white-breasted nuthatch, 44; red-breasted nuthatch, 1; brown creeper, 23; winter wren, 2; robin, 4; hermit thrush, 1; eastern bluebird, 44; golden-crowned kinglet, 36; ruby-crowned kinglet, 3; northern shrike, 2; starling, 3267; myrtle warbler, 28; English sparrow, 639; eastern meadowlark, 7; purple grackle (bronzed), 1; brown-headed cowbird, 9; evening grosbeak, 2; Am. goldfinch, 92; slate-colored junco, 209; tree sparrow, 921; field sparrow, 20; white throated sparrow, 11; fox sparrow, 1; swamp sparrow, 8; song sparrow, 44. **Total,** 46 species; 6636 individuals.—H. J. Adams, H. Amidon, Mr. and Mrs. H. P. Austin, Mr. and Mrs. W. A. Ball, F. T. Bashour, A. P. Bennet, Mr. and Mrs. E. A. Bergstrom, E. Downey, Mr. and Mrs. L. I. French, R. Keirstead, F. D. Knight, L. Lines, E. A. Maines, A. H. Morgan, J. O'Brien, G. H. Parks, D. Purinton, T. B. Rhines, Mr. and Mrs. R. Risley, T. K. Shires, C. Snow, A. D. Spring, C. Stamm, E. Wadstrom, N. West, L. J. Whittles, J. L. Woodson (Hartford Bird-Study Club).

45. New Haven, Conn. (including parts of East Haven, West Haven, North Haven, Hamden, Bethany, Woodbridge, Branford, and North Branford townships).—Dec. 26; 6:30 a.m. to 5 p.m. Clear; temp. 8° to 15°; wind NW, fresh to strong; ground covered with 8-in. fresh snow; fresh ponds and reservoirs 90% frozen. Observers in 4 parties, all using cars. Common loon, 5; red-throated loon, 5; horned grebe, 3; pied-billed grebe, 5; European cormorant, 24; mallard, 14; black duck, 627; European widgeon, 1 (I.R.B., P.B.); baldpate, 90; green-winged teal, 1; wood duck, 1; redhead, 40; ring-necked duck, 76; greater scaup duck, 6250; lesser scaup duck, 151; Am. golden-eye, 152; buffle-head, 3; old-squaw, 17; white-winged scoter, 114; surf scoter, 25; Am. scoter, 7; ruddy duck, 12; Am. merganser, 21; red-breasted merganser, 10; sharp-shinned hawk, 1; red-tailed hawk, 8; red-shouldered hawk, 5; bald eagle, 1; sparrow hawk, 3; ruffed grouse, 4; Am. coot, 1; killdeer, 2; purple sandpiper, 14; great black-backed gull, 3; herring gull, 1095; ring-billed gull, 6; mourning dove, 16; belted kingfisher, 1; yellow-shafted flicker, 3; hairy woodpecker, 13; downy woodpecker, 18; horned lark (northern), 4; blue jay, 54; Am. crow, 600; black-capped chickadee, 75; white-breasted nuthatch, 10; red-breasted nuthatch, 1; brown creeper, 10; winter wren, 2; eastern bluebird, 5; golden-crowned kinglet, 25; starling, 130; myrtle warbler, 4; English

sparrow, 198; red-wing, 86; purple grackle, 1; brown-headed cowbird, 40; Am. goldfinch, 134; Savannah sparrow, 6; slate-colored junco, 146; tree sparrow, 217; field sparrow, 1; white-throated sparrow, 10; fox sparrow, 2; song sparrow, 12. **Total,** 65 species; 10,651 individuals.—Irston R. Barnes, Peter Bellinger, Samuel Bogan, Henry Bunting, Mary I. Bunting, Henry H. Collins, Jr., William Gumbart, Richard E. Harrison, Robert Judd, Frank P. Mathews, Stephen B. Mathews, Robert Cushman Murphy, Benton Owen, John R. Paul; and at feeding stations, Mrs. J. W. Black, Mrs. S. W. Gilbert, Frederick Grelle, Mrs. Emil Roth, Mrs. H. G. Woodcock.

46. Oxford, Conn. (Quaker Farms to Stevenson, to Squantuck, and back; old, bushy fields 60%, woods 25%, river-bank 10%, open land 5%).—Jan. 2; 7:30 a.m. to 3 p.m. Partly cloudy, slowly clearing; temp. 25° to 30°; wind NW, about 10-30 m.p.h.; ground covered with about 2-in. fresh snow; Housatonic River open and very high; ponds mostly open. Total hours, 7½ (on foot); total miles, 13 (on foot). Large hawk (unidentified), 1; ruffed grouse, 7; herring gull, 3; yellow-shafted flicker, 8; hairy woodpecker, 5; downy woodpecker, 6; blue jay, 36; Am. crow, 12; black-capped chickadee, 42; white-breasted nuthatch, 1; brown creeper, 1; golden-crowned kinglet, 4; starling, 10; myrtle warbler, 50; English sparrow, 26; Am. goldfinch, 2; slate-colored junco, 37; tree sparrow, 14. **Total,** 18 species; 265 individuals.—Alfred P. Harger.

47. Saybrook, Conn. (A 15-mile circle with Lyme on the east, Hammonasset Beach on the west, and Hadlyme on the north; Long Island Sound 20%, bays 15%, beach 10%, Connecticut River 10%, salt marsh 10%, fresh marsh 5%, mixed upland woods 10%, bottomland woods 5%, swamp 5%, fields 5%, hedgerows and bushy pastures 5%).—Dec. 28; 6:30 a.m. to 5:15 p.m. Sunny; temp. 28°; wind W and SW, 0-10 m.p.h.; ground covered with 8-15-in. old snow; ponds, Connecticut River above Essex, and marshes frozen; bays half frozen. Observers together. Total hours on foot, 8; total miles, 68½ (59 miles by car; 9½ on foot). Common loon, 9; red-throated loon, 4; Holboell's grebe, 4; horned grebe, 9; pied-billed grebe, 5; swan (mute?), 1; Canada goose, 19; mallard, 9; black duck, 1510; baldpate, 4; pintail, 9; redhead, 3; canvas-back, 9; greater scaup duck, 231; lesser scaup duck, 1 (all scaup specifically identified were greater, except the 1 lesser); Am. golden-eye, 120; buffle-head, 59; old-squaw, 15; white-winged scoter, 110; surf scoter, 3; Am. scoter, 2; ruddy duck, 304; hooded merganser, 1; Am. merganser, 248; red-breasted merganser, 41; sharp-shinned hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 1; bald eagle, 2; sparrow hawk, 2; Am. coot, 504; killdeer, 1; purple sandpiper, 3; great black-backed gull, 17; herring gull, 329; ring-billed gull, 242; yellow-shafted flicker, 5; hairy woodpecker, 1; downy woodpecker, 7; horned lark (northern), 13; blue jay, 21; Am. crow, 47; black-capped chickadee, 34; brown creeper, 2; eastern bluebird, 12; golden-crowned kinglet, 7; Am. pipit, 1; cedar waxwing, 12; starling, 140; myrtle warbler, 18; English sparrow, 12; eastern meadowlark, 3; rusty blackbird, 7; Am. goldfinch, 13; slate-colored junco, 12; tree sparrow, 15; swamp sparrow, 4; song sparrow, 5. **Total,** 58 species; 4229 individuals.—Irston R. Barnes, Henry Bunting.

48. Simsbury, Conn. (center to Town Forest, to West Simsbury Reservoir, to McLean Preserve, to Great Pond Road, to center; open farmland 40%, deciduous woodlots 30%, hemlock and white pine groves 20%, cedars 5%, marsh 5%).—Dec. 27; 8:30 a.m. to 4:30 p.m. Partly cloudy; temp. 6° to 22° to 30°; wind NW working around to S, 1-7 m.p.h.; ground covered with 4-in. snow; ponds and streams frozen. Total miles, 20 (on foot). Ruffed grouse, 2; pileated woodpecker, 1; hairy woodpecker, 4; downy woodpecker, 1; blue jay, 42; Am. crow, 75; black-capped chickadee, 15; white-breasted nuthatch, 7; golden-crowned kinglet, 7; starling, 5; English sparrow, 53; Am. goldfinch, 37; slate colored junco, 34; tree sparrow, 13; white-throated sparrow, 1; song sparrow, 2. **Total,** 16 species; 299 individuals. (Seen during period: horned owl, 1; sharp-shinned hawk, 1; mourning dove, 1; black duck, 2; brown creeper, 1.)—Eliot P. Dodge.

49. Amagansett to Watermill, L. I., N. Y. (west shore Gardiner's Bay to west end Mecox Bay; north to Cedar Point, 3 Mile Harbor, Noyac Bay; south along ocean beach; coastal ponds, fresh, brackish, and salt; salt marsh, fresh-water marsh, potato fields, farmlands and woodlots, oak-pine "woods," deciduous woods, conifer groves (planted), summer cottages and estates).—Jan. 2; 6:15 a.m. to 4:45 p.m. Mostly cloudy; temp. 30° to 38° to 32°; wind SE, 5 m.p.h. until 7 a.m., then NNW, increasing rapidly to about 40 m.p.h. Traces of powdery snow on ground; most ponds nearly free of ice. Seven observers in 3 parties, together only at start. Total hours, 29; total miles, 181 (146 by car, 35 on foot). Common loon, 10; red-throated loon, 16; Holboell's grebe, 1; horned grebe, 8; great blue heron, 3; mute swan, 110; whistling swan, 1 (adult, with mutes, seen by all observers); Canada goose, 987 (650±50, 337); mallard, 52; black duck, 1196 (450±50, 746); gadwall, 1; European widgeon, 4 (2 drakes, 2 presumptive ducks); baldpate, 33; pintail, 28; green-winged teal, 2; redhead, 4; canvas-back, 8; greater scaup duck, 60; lesser scaup duck, 13; unidentified scaups, 10;

Am. golden-eye, 188; buffle-head, 85; old-squaw, 93; white-winged scoter, 273 (100 est., 173); surf scoter, 251 (90 est., 161); Am. scoter, 78 (50 est., 28); unidentified scoters, 671 (500 est., 121); ruddy duck, 218 (70 est., 148); hooded merganser, 6; Am. merganser, 44; red-breasted merganser, 96; unidentified ducks, 100 (est.); Cooper's hawk, 1; sharp-shinned hawk, 1; marsh hawk, 4; sparrow hawk, 1; Am. coot, 44; killdeer, 1; Wilson's snipe, 1; Iceland gull, 1; great black-backed gull, 92; herring gull, 1988 (1600 est., 388); ring-billed gull, 254 (160 est., 94); dovekie, 8; mourning dove, 1; rock dove, 4 (4 apparently truly feral, 8 dubiously so); screech owl, 2; long-eared owl, 1; belted kingfisher, 1; yellow-shafted flicker, 3; downy woodpecker, 3; horned lark, 93 (northern, 92; prairie, 1, seen at close range with northern horned larks, absence of all trace of yellowish color on head and throat quite apparent—E.L.C.); blue jay, 13; Am. crow, 41; black-capped chickadee, 14; robin, 1; eastern bluebird, 6; golden-crowned kinglet, 2; starling, 234 (150 est., 84); myrtle warbler, 62 (20 est., 42); English sparrow, 33; eastern meadowlark, 28; red-wing, 15; brown-headed cowbird, 2; pine siskin, 71; Am. goldfinch, 13; Ipswich sparrow, 1; Savannah sparrow, 2; slate-colored junco, 39; tree sparrow, 19; white-throated sparrow, 5; fox sparrow, 3; song sparrow, 6; snow bunting, 1. **Total,** 71 species (1 additional subspecies); about 7765 individuals.—Arthur E. Aronoff, Edward L. Chalif, Rodney B. Cole, G. G. Daniels, Richard B. Fischer, William T. Helmuth, George D. Scott, Jr.

[On a 10-hour scouting trip made over part of this area (East Hampton to Watermill) on Dec. 31, Dr. Helmouth personally recorded *893 individuals of 88 species*, including the following species which were not found on Jan. 2: pied-billed grebe, 2; gannet, 7; double-crested cormorant, 1; Am. bittern, 1; brant, 3; snow goose, 3; ring-necked duck, 6; Barrow's golden-eye, 1 ♂ (fully described) and 2 presumptive ♀s: eider (sp.), 1; ring-necked pheasant, 1; Bonaparte's gull, 4; common kittiwake, 3; razor-billed auk, 1; barn owl, 1; hairy woodpecker, 1; red-breasted nuthatch, 2; long-billed marsh wren, 1; hermit thrush, 1; redpoll, 2; red crossbill, 1; field sparrow, 1; swamp sparrow, 3; and Lapland longspur, 1.—Ed.]

50. Brooklyn, N. Y. (The Narrows, Coney Island, east to Cross Bay Blvd., Jamaica Bay, Riis Park, Rockaway Point Jetty and Ocean; outer beach and ocean area 20%, open fields 20%, salt marsh 30%, mixed woodland 30%).—Jan. 2; 7 a.m. to 4:30 p.m. Cloudy to partly cloudy; snow in a.m., clearing in p.m.; temp. 28° to 35°; wind NW, variable. Seventeen observers in 7 groups of 2 or more, on foot. Total hours, 100; total miles, 50. Common loon, 6; red-throated loon, 4; horned grebe, 9; European cormorant, 1; double-crested cormorant, 1; black-crowned night heron, 6; great blue heron, 1; Am. bittern, 1; mallard, 7; black duck, 820; redhead, 4; canvas-back, 10; greater scaup duck, 6000+; Am. golden-eye, 110; buffle-head, 6; king eider, 1; Am. scoter, 30; white-winged scoter, 300; Am. merganser, 6; red-breasted merganser, 1520; goshawk, 1 (adult at close range through 7 x 50 binoculars, perched and flying—A.J., L.J.); sharp-shinned hawk, 1; rough-legged hawk, 1; marsh hawk, 9; pigeon hawk, 2 [no details—Ed.]; sparrow hawk, 16; killdeer, 8; greater yellow-legs, 1; purple sandpiper, 23; red-backed sandpiper, 25; sanderling, 60; great black-backed gull, 200; herring gull, 10,000; ring-billed gull, 263; black-headed gull, 1; laughing gull, 1; Bonaparte's gull, 1500+; short-eared owl, 1; hairy woodpecker, 1; downy woodpecker, 7; horned lark, 29; blue jay, 5; Am. crow, 21; black-capped chickadee, 20; white-breasted nuthatch, 4; red-breasted nuthatch, 2; brown creeper, 1; robin, 1; starling, 1800; myrtle warbler, 1; English sparrow, 680; eastern meadowlark, 1; cardinal, 1; Am. goldfinch, 3; Savannah sparrow, 2; sharp-tailed sparrow, 1; seaside sparrow, 1; slate-colored junco, 40; tree sparrow, 25; field sparrow, 1; white-throated sparrow, 60; fox sparrow, 4; swamp sparrow, 1; song sparrow, 5. **Total,** 64 species; about 23,673 individuals.—Emma Brush, Geoffrey Carleton (Robt. Clermont, Elizabeth Feldhusen, Dora Fluekiger, Herman Goebels, Malcolm Gordon, Alex and Louise Jones, David Kreissman, Wolfram Kuebler, James Murphy, Esther Swayer, Hubert J. Thelen, Ida Werner, Edward J. Whelen, Audrey Wrede.

51. At sea off Brooklyn, N. Y. (from Sheepshead Bay, Brooklyn, to a point about 25 miles south of Sheepshead Bay and about 9 miles east of Asbury Park, N. J.)—Dec. 28; 7:30 a.m. to 4:30 p.m. Clear; temp. 30°; wind NW, moderate; ocean calm. Two observers on 1 boat. Total hours, 9; total miles, 50 (all by boat). Common loon, 4; loon (sp.), 3; gannet, 85; Am. golden-eye, 1; old-squaw, 2; white-winged scoter, 4; scoter (sp.), 4; great black-backed gull, 150; herring gull, 700; Bonaparte's gull, 400; common kittiwake, 1; dovekie, 12; snow bunting, 1 (seen flying over when the boat was at the farthest point from land—A.P.). **Total,** 11 species; about 1367 individuals.—Arthur Peck, Arthur Aronoff.

52. Hampton Bays to Bridgehampton, L. I., N. Y.—Dec. 28; 7:20 a.m. to 4:45 p.m. Clear; temp, 21° to 26°; wind NW, light; fresh-water ponds and Mecox Bay frozen, other bays partly frozen. Common loon, 4; red-throated loon, 4; horned grebe, 20; pied-billed grebe, 1; gannet, 1; great blue heron, 1; mute swan, 15; Canada goose, 805; brant, 23; mallard, 17; black duck, 1255 (est.); shoveller, 1; scaup duck (sp.), 259; Am. golden-eye, 129; buffle-head, 55; old-squaw, 127; white-winged scoter,

550; surf scoter, 4; Am. scoter, 4; ruddy duck, 16; hooded merganser, 1; Am. merganser, 2; red-breasted merganser, 153; Cooper's hawk, 1; marsh hawk, 6; sparrow hawk, 3; Am. coot, 97; black-bellied plover, 1; sanderling, 24; great black-backed gull, 55; herring gull, 1500 (est.); ring-billed gull, 59; short-eared owl, 2; belted kingfisher, 2; downy woodpecker, 1; horned lark, 71 (northern, 66; prairie, 5); blue jay, 15; Am. crow, 47; black-capped chickadee, 11; white-breasted nuthatch, 1; red-breasted nuthatch, 2; brown creeper, 2; robin, 3; golden-crowned kinglet, 2; Am. pipit, 1; starling, 157; myrtle warbler, 15; palm warbler (western), 2; English sparrow, 8; eastern meadowlark, 37; pine siskin, 1; Am. goldfinch, 17; eastern towhee, 1; Savannah sparrow, 1; tree sparrow, 8; white-throated sparrow, 8; fox sparrow, 3; swamp sparrow, 2; song sparrow, 11. **Total,** 59 species (1 additional subspecies); about 5624 individuals.—Arthur Cooley, LeRoy Wilcox.

53. Montauk, L. I., N. Y. (from Point lighthouse westward on both coasts to Devon Landing and Beach Hampton; including Oyster Pond, Great Pond and breakwater, Fort Pond, Napeague Harbor, Hither Hills State Park, Lazy Point, and Promised Land; ocean beach, wooded kettleholes and downs, scrub pitch pine woods, salt marsh, groves of planted conifers).—Dec. 26; dawn to dark. Fair; temp. 4° at start, 14° at close; wind NNW, more than 38 m.p.h.; ground mostly covered with crusty snow; little open water in any ponds except Great Pond (salt), none in most. Eight observers in 3 parties, together only at start. Total hours, 30; total miles, 75 (60 by car, 15 on foot). Common loon, 9; red-throated loon, 4; horned grebe, 12; pied-billed grebe, 1; gannet, 26; double-crested cormorant, 1; black duck, 21; scaup duck (probably greater), 254; Am. golden-eye, 205; buffle-head, 106; old-squaw, 19; eider, 17 (probably including both common and king eiders); white-winged scoter, 180; surf scoter, 74; Am. scoter, 212; unidentified scoters, 258 (170 est., 88); Am. merganser, 2; red-breasted merganser, 57; Cooper's hawk, 1; sharp-shinned hawk, 1; marsh hawk, 7; sparrow hawk, 2; Florida gallinule, 1 (seen in good light, at reasonably near distance, on Fort Pond, where also observed on Dec. 11.—R.B.C., W.T.H., G.D.S.); Am. coot, 26; purple sandpiper, 3; great black-backed gull, 98; herring gull, 1275 (1000 est., 275); Bonaparte's gull, 211 (150 est., 61); razor-billed auk, 2; dovekie, 6; barn owl, 1; yellow-shafted flicker, 6; downy woodpecker, 1; horned lark, 85 (northern, 84; prairie, 1 at close range, in good light; no trace of yellowish color on head or throat; 2 or 3 probable others also seen—R.B.C., W.T.H., G.D.S.); blue jay, 3; Am. crow, 47; black-capped chickadee, 45; white-breasted nuthatch, 1; red-breasted nuthatch, 7; brown thrasher, 1; robin, 6; hermit thrush, 1; golden-crowned kinglet, 1; starling, 151 (100 est., 51); myrtle warbler, 315 (200 est., 115); English sparrow, 5; eastern meadowlark, 1; brown-headed cowbird, (flock), 150 (est.); pine siskin, 40; Am. goldfinch, 13; red crossbill, 1 ♀; Ipswich sparrow, 1; Savannah sparrow, 2; slate-colored junco, 8; field sparrow, 1; tree sparrow, 11; white-throated sparrow, 13; fox sparrow, 5; song sparrow, 2; Lapland longspur, 2 (one or both observed by all parties); snow bunting, 145 (100 est., 45). **Total,** 60 species (1 additional subspecies); about 4145 individuals. An unidentified "alcid" was probably another razor-billed auk; a very freshly dead long-eared owl was found near foot of lighthouse.—Irwin Alperin, Gilbert Banner, Geoffrey Carleton, Rodney B. Cole, Malcolm S. Gordon, William T. Helmuth, George D. Scott, Jr., Walter W. Sedwitz.

54. Smithtown, L. I., N. Y. (T. J. White Estate, Nissequogue River, Short and Long Beaches, Stony Brook Harbor, and Old Field Point; salt marsh 10%, fields 15%, wooded swamps 20%, woods 25%, shore 30%).—Dec. 27; 5:35 a.m. to 4:55 p.m. Clear, becoming thinly overcast by noon and remaining so until dark; temp. 13° at 5:35 a.m., max. 29° at 5 p.m.; wind NW, light; 12-in. snow on ground; most ponds and lakes entirely frozen; visibility excellent. Four observers operating singly and together. Total miles, 47 (37 by car, 10 afoot). Common loon, 12; red-throated loon, 2; horned grebe, 10; great blue heron, 3; black-crowned night heron, 23; mute swan, 6; Canada goose, 34; mallard, 44; black duck, 1233; gadwall, 1; baldpate, 28; pintail, 2; green-winged teal, 5; ring-necked duck, 75; canvas-back, 3; greater scaup duck, 11; lesser scaup duck, 4; Am. golden-eye, 72; buffle-head, 3; old-squaw, 310; Am. scoter, 1; white-winged scoter, 1100; surf scoter, 5; hooded merganser, 5; Am. merganser, 7; red-breasted merganser, 251; red-tailed hawk, 3; red-shouldered hawk, 1; ring-necked pheasant, 1; clapper rail, 1; Am. coot, 9; killdeer, 3; woodcock, 1, flushed in a very wet, unfrozen wooded swamp—R.B.F.); great black-backed gull, 23; herring gull, 2317; ring-billed gull, 150; mourning dove, 2; screech owl, 1; horned owl, 2; long-eared owl, 2; belted kingfisher, 2; yellow-shafted flicker, 4; hairy woodpecker, 5; downy woodpecker, 14; horned lark (northern), 67; blue jay, 78; Am. crow, 283; fish crow, 1; black-capped chickadee, 54; white-breasted nuthatch, 12; brown creeper, 1; winter wren, 11; Carolina wren, 2; catbird, 1; brown thrasher, 1; robin, 2; hermit thrush, 2; eastern bluebird, 12; golden-crowned kinglet, 14; Am. pipit, 1; starling, 80 (est.); myrtle warbler, 27; English sparrow, 70 (est.); eastern meadowlark, 8; rusty blackbird, 12; purple finch, 1; common redpoll, 2; pine siskin, 1; Am. goldfinch, 122; Savannah sparrow, 2; slate-colored junco, 87; tree sparrow, 49; field sparrow, 1; white-throated sparrow, 73; fox sparrow, 5; swamp sparrow, 20; song sparrow, 72; snow bunting,

42. **Total,** 78 species; 7007 individuals. (Fresh tracks of bob-white seen in snow.)—Richard B. Fischer, Grier Ralston, Robert Ralston, Walton Sabin.

55. Southern Nassau County, L. I., N. Y. (Atlantic Beach east to Jones Beach, north to Westbury and Garden City; circle centered on Baldwin; open ocean 10%, suburban development 35%, beaches, bay, tidal marsh 15%, parks, farms, woodland 10%).—Jan. 2; 6 a.m. to 11:30 p.m. Partly cloudy, local snow squalls; temp. 32° to 36° to 30°; wind NW, 8-30 m.p.h.; ground covered with 4-12-in. melting snow; fresh-water ponds 50% ice-free; streams flooded. Thirty-three observers in 7 parties. Total hours, 62 (42 on foot, 20 by car); total miles, 285 (65 on foot, 220 by car). Common loon, 14; red-throated loon, 37; Holboell's grebe, 1; horned grebe, 50; pied-billed grebe, 3; gannet, 3; great blue heron, 18; black-crowned night heron, 12; Am. bittern, 3; mute swan, 10 (totally wild on many L.I. ponds); Canada goose, 40; mallard, 163; black duck, 3555 (3200±200, 355); gadwall, 20; European widgeon, 1; baldpate, 558; pintail, 127; green-winged teal, 121; shoveller, 20; redhead, 8; greater scaup duck, 220; lesser scaup duck, 2 (seen flying and on water at very close range in direct comparison to *marila*—R.A., R.B., R.S.); Am. golden-eye, 10; buffle-head, 5; old-squaw, 68; king eider, 1 (in surf, studied in every detail—J.M.); white-winged scoter, 21; surf scoter, 1; Am. scoter, 1; ruddy duck, 2; Am. merganser, 78; red-breasted merganser, 128; sharp-shinned hawk, 4; Cooper's hawk, 9; red-shouldered hawk, 2; rough-legged hawk, 3; marsh hawk, 9; sparrow hawk, 13; bob-white, 12; ring-necked pheasant, 3; clapper rail, 2; Am. coot, 48; killdeer, 16; Wilson's snipe, 2; greater yellow-legs, 2; purple sandpiper, 4; sanderling, 11; great black-backed gull, 299; herring gull, 8869 (8300±500, 369); ring-billed gull, 61; Bonaparte's gull, 1; dovekie, 1 (J.M., G.R.); rock dove, 7 (living wild on outer beaches); mourning dove, 15; barn owl, 1; screech owl, 1; long-eared owl, 6; belted kingfisher, 1; yellow-shafted flicker, 5; downy woodpecker, 21; horned lark 280 (265 northerns; 15 prairies, identified by 2 parties); blue jay, 30; Am. crow, 218; black-capped chickadee, 92; white-breasted nuthatch, 13; brown creeper, 7; winter wren, 2; long-billed marsh wren, 1; catbird, 7; brown thrasher, 2; robin, 26; hermit thrush, 3; Am. pipit, 7; cedar waxwing, 1; starling, 1614 (1200±100, 414); myrtle warbler, 137; palm warbler, 1 (at feeding station—E.C.); English sparrow, 1078; eastern meadowlark, 5; red-wing, 113; purple grackle, 3; brown-headed cowbird, 130; cardinal, 4; purple finch, 1; house finch, 104 (now established on L.I.); pine siskin, 42; Am. goldfinch, 161; Ipswich sparrow, 1; Savannah sparrow, 30; sharp-tailed sparrow, 3; seaside sparrow, 1; vesper sparrow, 1; slate-colored junco, 102; tree sparrow, 189; chipping sparrow, 2; field sparrow, 26; white-throated sparrow, 107; fox sparrow, 20; swamp sparrow, 5; song sparrow, 108. **Total,** 100 species (1 additional subspecies); about 19,739 individuals. (Seen preceding week in area: eastern bluebird, golden-crowned kinglet, eastern towhee, snow bunting.)—J. Amari, R. S. Arbib, Jr., Dr. and Mrs. B. C. Berliner, Dr. R. W. Berliner, Mr. and Mrs. J. Bull, Miss E. Campbell, G. Coheleach, Mr. and Mrs. D. Cooper, Miss L. Cooper, J. J. Elliott, J. Emory, R. Ficken, G. Greller, D. E. Harrower, Dr. H. Kimball, J. Mayer, Mrs. H. Meinke, E. Morgan, T. Pettit, Mr. and Mrs. J. Ritchie, Mrs. R. Ritzman, R. Ritzman, Jr., G. Rose, R. Sloss, Miss E. Stephens, Miss H. Sullivan, Mr. and Mrs. E. W. Teale, M. Weyl.

56. Western Long Island, N. Y. (15-mile circle: Flushing Bay to North Hills, Whitestone to Atlantic Beach; suburban New York City 30%, Atlantic Ocean coast 5%, coastal marshes 15%, fresh water 5%, deciduous woods 10%, evergreen woods 5%, open woods 30%).—Dec. 26; 5:30 a.m. to 6 p.m. Clear; temp. 6° to 20° to 15°; wind NNW, 30-35 m.p.h., diminishing in p.m.; 6-12-in. snow; fresh water mostly frozen. Twenty-four observers in 12 parties. Total hours, 90; total miles, 164 (71 on foot, 93 by car). Common loon, 3; red-throated loon, 1; Holboell's grebe, 3; horned grebe, 19; great blue heron, 1; black-crowned night heron, 12; mute swan, 4; snow goose, 3; mallard, 192 (150 est., 42); black duck, 4000 (±100); gadwall, 6; European widgeon, 1; baldpate, 355 (350 est., 5); pintail, 36; green-winged teal, 37; shoveller, 4; redhead, 2; canvas-back, 411; greater scaup duck, 3832 (3300 est., 532); Am. golden-eye, 181; bufflehead, 107; old-squaw, 1; king eider, 1; white-winged scoter, 39; Am. scoter, 20; ruddy duck, 50; Am. merganser, 51; red-breasted merganser, 280; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 6; red-shouldered hawk, 2; rough-legged hawk, 4; marsh hawk, 8; gyrfalcon, 1 [no details—Ed.]; sparrow hawk, 15; ring-necked pheasant, 11; clapper rail, 1; Am. coot, 23; killdeer, 9; woodcock, 1; Wilson's snipe, 1; purple sandpiper, 3; red-backed sandpiper, 1; sanderling, 13; great black-backed gull, 64; herring gull, 6330 (3500 est., 2830); ring-billed gull, 42; Bonaparte's gull, 6; dovekie, 1; mourning dove, 6; screech owl, 3; long-eared owl, 2; short-eared owl, 4; belted kingfisher, 1; yellow-shafted flicker, 2; hairy woodpecker, 3; downy woodpecker, 43; horned lark, 194 (northern, 188; prairie, 6); blue jay, 48; Am. crow, 155; fish crow, 2; black-capped chickadee, 141; white-breasted nuthatch, 22; brown creeper, 51; winter wren, 2; long-billed marsh wren, 1; catbird, 1; robin, 3; eastern bluebird, 2; golden-crowned kinglet, 5; Am. pipit, 5; starling, 860; myrtle warbler, 4; yellow-throat, 1; English sparrow, 514; eastern meadowlark, 3; red-wing, 44; rusty blackbird, 22; purple grackle, 16 (purple, 10; bronzed, 6); brown-headed cowbird, 9;

cardinal, 2; evening grosbeak, 1; pine siskin, 28; Am. goldfinch, 88; eastern towhee, 1; Savannah sparrow, 10; sharp-tailed sparrow, 1; seaside sparrow, 1; vesper sparrow, 1; slate-colored junco, 157; tree sparrow, 280; field sparrow, 25; white-throated sparrow, 179; fox sparrow, 11; swamp sparrow, 19; song sparrow, 101; Lapland longspur, 3; snow bunting, 50. **Total,** 99 species (2 additional subspecies); approximately 19,324 individuals.—Richard H. Adelson, Elizabeth Astle, William O. Astle, William R. Astle, Herman L. Bohn, Mrs. Edith Bull, Orville Dunning, Eugene Eisenmann, Mamie Fay, Michael Fitzgerald, John W. Flavin, Jr., Herman Goebel, Mrs. E. K. Jockers, Richard Koeppel, John H. Mayer, Mrs. Eleanor J. Reid, Mr. and Mrs. William W. Reid, Mr. and Mrs. William W. Reid, Jr., Arthur T. Skopec, John F. Wells, Charles F. Wright, Sam Yeaton (Queens County Bird Club).

57. Bear Mountain, Harriman State Park, N. Y. (Bear Mountain and Iona Island south to Jones Point and west to Route 17, entire park area; deciduous woods 14%, coniferous woods 27%, open fields 26%, swamps 20%, river 13%).—Dec. 26; 6 a.m. to 5 p.m. Clear; temp. -2° at start, 13° at finish; wind WNW, 10-20 m.p.h.; crusty snow, 8 to 12 in.; all inland lakes frozen. Nine observers in 4 parties. Total hours, 89; total miles, 144 (120 by car, 24 on foot). Mallard, 12; black duck, 153; baldpate, 8; wood duck, 1; Am. golden-eye, 8; Am. merganser, 61; bald eagle, 1; peregrine falcon, 1; ruffed grouse, 4; Am. coot, 33; great black-backed gull, 1; herring gull, 138; ring-billed gull, 1; barred owl, 1; belted kingfisher, 1; pileated woodpecker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 3; downy woodpecker, 5; blue jay, 20; Am. crow, 4; black-capped chickadee, 64; white-breasted nuthatch, 11; brown creeper, 10; golden-crowned kinglet, 36; starling, 15; English sparrow, 35; red-wing, 7; Am. goldfinch, 5; slate-colored junco, 61; tree sparrow, 93; swamp sparrow, 1; song sparrow, 5. **Total,** 33 species; 801 individuals.—Robert Deed, Peter Smith, George Tamsen, Peter Taylor, Arthur Weeks, Fred Ulmer, Stanley Grierson, John Kenney, John Orth.

58. Bronx-Westchester Region, N. Y. (northern Bronx and southern Westchester counties as far as Irvington, Scarsdale, and Rye).—Dec. 26; 7 a.m. to 6 p.m. Clear; temp. 8° (min.) to 20° (max.); wind NW, strong; ground completely snow-covered to a depth of 1 ft.; inland fresh-water ponds frozen. Forty observers in 6 parties. Total hours, 66 (15 by car, 51 on foot); total miles, 58 (18 by car, 40 on foot). Common loon, 5; red-throated loon, 7; horned grebe, 3; pied-billed grebe, 1; European cormorant, 6 (4 adults, 2 imm., seen through high-powered telescope—J.B., H.D., R.H.; present for past 7 winters); great blue heron, 14; black-crowned night heron, 37; mute swan, 1; Canada goose, 118; mallard, 267; black duck, 1800 (est.); baldpate, 5; pintail, 8; green-winged teal, 10; wood duck, 3; canvas-back, 660 (unusually high number, approx. 2½ times previous max. count); greater scaup duck, 6600 (est.); Am. golden-eye, 310; buffle-head, 18; old-squaw, 23; white-winged scoter, 500 (est.); surf scoter, 12; ruddy duck, 26 (twice previous max. count); hooded merganser, 10; Am. merganser, 78; red-breasted merganser, 235; goshawk, 1 (adult); sharp-shinned hawk, 2; Cooper's hawk, 5; red-tailed hawk, 15; red-shouldered hawk, 8; rough-legged hawk, 1; bald eagle, 1; marsh hawk, 2; peregrine falcon, 2; sparrow hawk, 10; ring-necked pheasant, 78; Virginia rail, 1; killdeer, 12; Wilson's snipe, 1; purple sandpiper, 65; glaucous gull, 1; great black-backed gull, 29; herring gull, 9540 (est.); laughing gull, 2; Bonaparte's gull, 56; rock dove, 50 (includes only those living a truly wild existence, as on beaches, etc.); barn owl, 2; horned owl, 4; barred owl, 4; long-eared owl, 6; short-eared owl, 8; belted kingfisher, 8; yellow-shafted flicker, 1; hairy woodpecker, 21; downy woodpecker, 69; horned lark (northern), 2; blue jay, 203; Am. crow, 295; black-capped chickadee, 280 (est.); tufted titmouse, 4; white-breasted nuthatch, 75; red-breasted nuthatch, 1; brown creeper, 24; winter wren, 5; long-billed marsh wren, 1; short-billed marsh wren, 1 (very rare in this area, 4th time in 25 years); catbird, 2; robin, 7; hermit thrush, 1; golden-crowned kinglet, 2; Am. pipit, 27; cedar waxwing, 9; starling, 5200 (est.); myrtle warbler, 6; English sparrow, 460 (est.); eastern meadowlark, 29; red-wing, 18; Baltimore oriole, 1 (♀; new to census; seen by Mr. and Mrs. A.C. at their feeding station; also present for some time before this date); purple grackle, 2 (purple, 1; bronzed, 1); brown-headed cowbird, 2; cardinal, 4; purple finch, 33; pine siskin, 56; Am. goldfinch, 83; eastern towhee, 5; Savannah sparrow, 7; sharp-tailed sparrow, 1; vesper sparrow, 3; slate-colored junco, 500 (est.); tree sparrow, 425; field sparrow, 11; white-throated sparrow, 196; fox sparrow, 8; swamp sparrow, 14; song sparrow, 132; snow bunting, 12. **Total,** 97 species (1 additional subspecies); about 28,910 individuals. (Seen Dec. 24: chipping sparrow, 1.)—A. Aronoff, J. Bull, I. Cantor, F. Cormier, Mr. and Mrs. A. Cruickshank, H. Darrow, W. Ephraim, W. Feigin, R. Fischer, H. Forster, R. Gershon, S. Harriot, R. Herbert, E. Karlan, I. Kassoy, J. Kieran, S. Komito, G. Komorowski, N. Levine, A. Milch, W. Nagler, W. Norse, J. Orenstein, A. Peck, J. Philips, G. Ralston, R. Ralston, M. Richter, D. Roche, M. Russak, W. Sabin, Miss E. Schemmer, J. Stegle, A. Thomas, J. Tiffany, Miss I. Werner, J. Wolff, A. Young, H. Young.

59. Buffalo, N. Y. (centering on Grand Island; including Niagara River and adjacent areas; open farmland 40%, deciduous woods 20%, parks 5%,

Niagara River and Buffalo Harbor 20%, cattail marshes, 3%, city, suburban, and industrial areas 12%).—Dec. 26; 6 a.m. to 7 p.m. Clear until 2 p.m., snow flurries thereafter; temp. 8 to 15° F.; wind NE, 4 m.p.h., shifting early to SW, max. 8-14 m.p.h. in afternoon; ½-1-in. snow on ground; Niagara River, Welland River, harbor, and the gorge at the falls open, all streams and ponds frozen. Forty-eight observers in 17 parties. Total hours, 125¾ (3½ at night); total miles, 488½ (145½ on foot, 343 by car). Common loon, 2; red-throated loon, 1; horned grebe, 5; double-crested cormorant, 2; black-crowned night heron, 6; mallard, 188; black duck, 1209 (250, 870 est., 89); baldpate, 3; pintail, 12; wood duck, 1 ♂ (J.S., T.L.B.—first seen in 20 counts); redhead, 7; ring-necked duck, 3; canvas-back, 2033 (2000 est., 33); greater scaup duck, 2988 (450, 2500 est., 38); lesser scaup duck, 3 (H.H.A., R.C.A., R.D., B.N., Mr. and Mrs. P.R.); Am. golden-eye, 2733 (1900 est., 833); buffle-head, 270; old-squaw, 59; white-winged scoter, 5; ruddy duck, 1; hooded merganser, 11; Am. merganser, 3179 (440, 2300 est., 439); red-breasted merganser, 67; sharp-shinned hawk, 1; red-tailed hawk, 15; rough-legged hawk, 27; marsh hawk, 30; sparrow hawk, 43; ring-necked pheasant, 137; glaucous gull, 1; great black-backed gull, 29; herring gull, 7401 (3400 est., 4001); ring-billed gull, 287; Bonaparte's gull, 1894 (800 est., 1094); rock dove, 4 (living on cliffs of Niagara gorge); mourning dove, 31; barn owl, 1 (H.D.M. and party); screech owl, 7 (1 dead); horned owl, 3; short-eared owl, 7; belted kingfisher, 2; red-headed woodpecker, 3; hairy woodpecker, 10; downy woodpecker, 66; horned lark (prairie), 1; blue jay, 26; Am. crow, 192; black-capped chickadee, 158; white-breasted nuthatch, 35; red-breasted nuthatch, 1; brown creeper, 32; robin, 2; golden-crowned kinglet, 1; starling, 1832 (620 est., 1212); English sparrow, 779; eastern meadowlark, 5; red-wing, 9; rusty blackbird, 6; brown-headed cowbird, 1; cardinal, 20; pine siskin, 1; Am. goldfinch, 2; slate-colored junco, 56; tree sparrow, 689; white-throated sparrow, 3; song sparrow, 6. **Total,** 65 species. (1 additional subspecies); about 26,644 individuals.—Barbara Allen, Robert F. Andrle, Harold H. Axtell, Rachel C. Axtell, Clark S. Beardslee, Claude Bishop, Thomas L. Bourne, Anne Broadbent, Winston W. Brockner, Richard Byron, Mr. and Mrs. Edward Cummiskey, Alice Dietrich, Richard Dooley, Mary L. Emerson, Herbert Evans, John Filor, Donald J. Gamble, Mr. and Mrs. Axel Heilborn, Julie Heilborn, Karl Heilborn, Leland Kirk, Mr. and Mrs. Walter Klabunde, Philip Klabunde, Charles Knoble, Robert Knoble, Clayton Knox, Wilmer Koch, Ira W. Lyon, Raymond McCann, Harold D. Mitchell, Lawrence Murphy, Bernard Nathan, Helen Nowacki, Mr. and Mrs. Philip Rosa, Richard Rosche, James Savage, Edward L. Seeber, Mr. and Mrs. Antonine Tulinoff, William C. Vaughan, Robert Wagner, Marie Wendling, Ellen J. Windsor, Cyril Wolfling (Buffalo Ornithological Society).

60. Conesus and Hemlock Lakes, N. Y. (both lakes, their shores and swamps and the intermediate higher farmland; water 27%, open farmland 46%, deciduous woods 9%, coniferous woods 4%, frozen swamp 5%, summer cottage area 9%).—Dec. 31; 8:30 a.m. to 4:30 p.m. Snow all day; temp. 17° to 22°; wind NW, 5-25 m.p.h.; ground covered with 3-6-in. snow, lakes clear of ice except at margins, swamps frozen, streams clear. Total hours, 8 (5 on foot, 3 in car); total miles, 70 (10 on foot, 60 in car). Common loon, 1; mallard, 71; black duck, 870; redhead, 43; ring-necked duck, 91; canvas-back, 650; greater scaup duck, 604; Am. golden-eye, 53; old-squaw, 1; hooded merganser, 14; Am. merganser, 133; red-breasted merganser, 12; unidentified ducks (poor visibility), 58; red-tailed hawk, 2; ring-necked pheasant, 4; Am. coot, 61; herring gull, 85; ring-billed gull, 9; downy woodpecker, 3; Am. crow, 8; black-capped chickadee, 56; golden-crowned kinglet, 1; northern shrike, 1; starling, 228; English sparrow, 70; Am. goldfinch, 6; slate-colored junco, 3; tree sparrow, 79; song sparrow, 1. **Total,** 28 species; 3221 individuals.—John L. Chapin.

61. Cortland, N.Y. (Tioughnioga River, south end of Skaneateles Lake, Gracie Swamp, marl ponds, and waterworks; lakes, ponds, river 10%, cultivated farmland 10%, semiopen country, frequently pastured, with scattered trees, open groves, little patches of woods and thickets of many kinds, little bogs, marshy places, streams and other habitats in small scattered patches 50%, mixed woodland, mostly unpastured and swampy, from young second growth to mature 30%).—Jan. 2; 7 a.m. to 6 p.m. Weather variable, with clear and cloudy periods and snow flurries; 8-in. fresh snow on ground; temp. 23° to 28°; wind W, mostly 2-20 m.p.h. Two observers in 2 parties. Total hours, 17 (14 on foot, 3 by car); total miles, 61 (12 on foot, 49 by car). Mallard, 3; black duck, 99; redhead, 2; ring-necked duck, 8; canvas-back, 1; greater scaup duck, 3; lesser scaup duck, 7; Am. golden-eye, 101; white-winged scoter, 1; Am. merganser, 80; Cooper's hawk, 1; sparrow hawk, 4; ruffed grouse, 1; ring-necked pheasant, 4; Am. coot, 1; herring gull, 31; ring-billed gull, 5; horned owl, 2; belted kingfisher, 1; yellow-shafted flicker, 1; hairy woodpecker, 2; downy woodpecker, 8; blue jay, 10; Am. crow, 18; black-capped chickadee, 83; white-breasted nuthatch, 4; brown creeper, 7; winter wren, 2; golden-crowned kinglet, 2; starling, 219; English sparrow, 213; tree sparrow, 197; song sparrow, 2; snow bunting, 3. **Total,** 34 species; 1126 individuals. (Seen in area Jan. 1 for one day only following heavy snow the night before: northern shrike, 1; horned lark, (northern 17 and Hoyt's, 2); Lapland longspur, 2. The Hoyt's, both typical adult males in company with a northern, were compared at 20 ft. by both observers with 7X glasses.)—Harold H. Axtell, Rachel C. Axtell.

62. Croton Point, N.Y. (woods 50%, cattail marshes 30%, shore 15%, fields 5%.) —Dec. 29; 7:55 a.m. to 5 p.m. Light rain or drizzle all day; temp. 32° to 42° to 34°; foggy from 9 a.m. on; visibility never more than 300 yds., generally only 50 to 100; 10-in. snow on ground; marshes partly frozen, Hudson River ice-free. Observers together. Total miles, 14 (2 by car, 12 afoot). Mallard, 1; black duck, 200 (est.); green-winged teal, 3; greater scaup duck, 4; Am. golden-eye, 10; buffle-head, 3; red-breasted merganser, 1; red-shouldered hawk, 1; bald eagle, 2; ruffed grouse, 1; ring-necked pheasant, 2; glaucous gull, 1; great black-backed gull, 3; herring gull, 450 (est.); barn owl, 1; barred owl, 2; long-eared owl, 1 saw-whet owl, 1 (captured); belted kingfisher, 1; downy woodpecker, 6; blue jay, 1; Am. crow, 14; black-capped chickadee, 10; white-breasted nuthatch, 5; brown creeper, 1; winter wren, 1; golden-crowned kinglet, 6; Am. pipit, 20; starling, 275 (est.); myrtle warbler, 3; English sparrow, 51 (est.); red-wing, 8; rusty blackbird, 2; Savannah sparrow, 6; slate-colored junco, 11; tree sparrow, 18; white-throated sparrow, 1; swamp sparrow, 1; song sparrow, 12. **Total,** 39 species; about 1140 individuals. — Richard B. Fischer, Charles Jacob, Duncan MacKenzie, Jack Moyer, David Ridgway.

63. Fort Plain, N.Y. (Mohawk River, valleys of Oak, Eisenlord, Otsquene, Otsquago, Otstungo creeks; mixed deciduous and coniferous woods 46%, river swamps and flats 27%, open farmland 27%). —Dec. 28; 7:30 a.m. to 6:30 p.m. Cloudy, some sunlight in afternoon; temp. 30°; wind NW, 1-5 m.p.h.; 4-in. snow; river frozen, some open water; creeks frozen. Total hours, 11; total miles, 15 (on foot). Black duck, 1; Am. merganser, 13; ruffed grouse, 2; ring-necked pheasant, 3; herring gull, 3; horned owl, 1; yellow-shafted flicker, 2; hairy woodpecker, 1; downy woodpecker, 2; blue jay, 1; black-capped chickadee, 26; white-breasted nuthatch, 6; brown creeper, 3; robin, 1; northern shrike, 1; starling, 66; English sparrow, 117; Am. goldfinch, 21; tree sparrow, 52; song sparrow, 2. **Total,** 20 species; 327 individuals. (Seen in area Dec. 26: belted kingfisher, 1.) —Douglas Ayres, Jr.

64. Geneva, N.Y. (area bounded by Junius on north, east side of Seneca Lake on east, Kashong on south, and Gorham on west; open farmland 50%, town suburbs 10%, mixed woods 25%, lake 15%.) —Jan. 2; 8:30 a.m. to 5 p.m. Partly cloudy; temp. 28° to 30°; wind strong SW in a.m., diminishing in p.m.; ground covered with 6-in. snow; water frozen except Seneca Lake. Thirteen observers in 8 parties (3 observers at feeding stations). Total hours, 34 (16 on foot; 18 by car); total miles, 64 (15 on foot, 49 by car). Horned grebe, 26; mallard, 26; black duck, 115; redhead, 3000 (est.); ring-necked duck, 6; canvas-back, 6; greater scaup duck, 2500 (est.); lesser scaup duck, 50; Am. golden-eye, 104; buffle-head, 4; Am. merganser, 35; red-breasted merganser, 6; red-tailed hawk, 1; red-shouldered hawk, 1; rough-legged hawk, 1; bald eagle, 1; marsh hawk, 1; sparrow hawk, 3; ring-necked pheasant, 7; Am. coot, 6; great black-backed gull, 4; herring gull, 75; ring-billed gull, 37; mourning dove, 12; screech owl, 1; short-eared owl, 1; yellow-shafted flicker, 1; hairy woodpecker, 3; downy woodpecker, 12; horned lark (prairie), 42; blue jay, 6; Am. crow, 750 (est.); black-capped chickadee, 24; white-breasted nuthatch, 4; brown creeper, 3; starling, 155; English sparrow, 107; cardinal, 4; Am. goldfinch, 2; slate-colored junco, 22; tree sparrow, 107; song sparrow, 5; snow bunting, 2. **Total,** 43 species; 7278 individuals.—F. Z. Hartzell, Foster L. Gambrell, Foster L. Gambrell, Jr., Kenneth C. Gambrell, Leora M. Dryer, Ethel M. Murden, Mr. and Mrs. O. F. Fanson, Mrs. Frank McGuire, Loren Ward, C. Sealey Peck, Mr. and Mrs. Arnold Barben (Eaton Bird Club).

65. Hamburg–Orchard Park–East Aurora, N.Y. (centering on Chestnut Ridge and including Emery Park; open farmland 60%, public parks 10%, suburban areas 5%, deciduous woods 15%, evergreen woods 1%, cattail marsh 1%, small ponds and 1 mile of Lake Erie shore 5%.) —Jan. 2; 8 a.m. to 6 p.m. Cloudy; temp. 25° to 31°; wind W, 20 m.p.h.; 8-in. snow on ground, drifts up to 3 ft.; ponds frozen, streams partially open. Forty-six observers in 19 parties. Total hours, 67½; total miles, 390¼ (68¾ on foot). Am. golden-eye, 28; goshawk, 1; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 2; rough-legged hawk, 4; marsh hawk, 3; sparrow hawk, 15; ruffed grouse, 2; ring-necked pheasant, 102; herring gull, 78; ring-billed gull, 2; mourning dove, 7; belted kingfisher, 1; hairy woodpecker, 8; downy woodpecker, 66; horned lark (prairie), 8; blue jay, 26; Am. crow, 13; black-capped chickadee, 237; white-breasted nuthatch, 9; red-breasted nuthatch, 1; brown creeper, 5; hermit thrush, 1 (seen at 4 ft.); golden-crowned kinglet, 9; starling, 908; English sparrow, 2512; eastern meadowlark, 1; red-wing, 6; cardinal, 7; common redpoll, 1; white-winged crossbill, 1; eastern towhee, 1; slate-colored junco, 99; tree sparrow, 707; song sparrow, 5; Lapland longspur, 4; snow bunting, 2475 (± 50). **Total,** 38 species; about 7358 individuals. (Seen in area within 5 days of count: northern shrike, 1; pileated woodpecker, 1.) —Mr. and Mrs. A. Heilborn, A. Wilson, H. Evans, Jr., H. Evans, Sr., I. Lyon, Mrs. A. Bacon, Mrs. E. Melberg, H. D. Mitchell, S. Dugan, M. Dugan, W. Dugan, P. Dugan, E. Jones, E. J. Windsor, R. C. Rosche, I. Woldman, Mr. and Mrs. A. Brettle, E. Seeber, Mr. and Mrs. E. Ullrich, Mr. and Mrs. J. Creighton, Mr. and Mrs. McShane, W. McShane, H. Thorpe, R. Knoble, C. Knoble, L. Knoble, C. T. Knox, B. Nathan, Mr. and Mrs. G. Griffin, D. Griffin, B. J. Wright II, F. Rew, F. J. Rew, R. En-

glehardt, A. Wander, Mrs. A. Ward, B. Windup, J. Margwort, Mrs. H. Hayes, F. T. Tilley (Buffalo Audubon Society).

66. Jamestown, N.Y. (center of town north to Gerry, east to Poland, south to Riverside; deciduous woods 10%, coniferous woods 14%, mixed deciduous and coniferous woods 29%, swampland 5%, fields 25%, streams and rivers 7%, marshes 10%).—Dec. 27: 7 a.m. to 5:15 p.m. Clear during a.m., clouding over at noon; temp. 10° to 20°; wind N, 5-20 m.p.h.; 1-6-in. fresh snow on ground; streams and rivers partly open, other water (including marshes and Lake Chautauqua) frozen. Eight observers in 3 parties. Total hours, 16¾ (9 on foot, 7¾ by car); total miles, 96 (82 by car, 14 on foot). Pied-billed grebe, 1 (seen at close range from bridge over Cassadaga Creek—C.E., C.P., P.L., L.L.); wood duck, 1 (imm., flushed from open stream near large marsh—C.B., R.A.S.); goshawk, 1 (ad. ♂ seen at 50 yds.—C.B.); sharp-shinned hawk, 1; sparrow hawk, 2; ruffed grouse, 8; ring-necked pheasant, 23; herring gull, 175 (est.); ring-billed gull, 9; mourning dove, 2; hairy woodpecker, 2; downy woodpecker, 26; blue jay, 10; Am crow, 3; black-capped chickadee, 72; white-breasted nuthatch, 26; brown creeper, 10; golden-crowned kinglet, 5; starling, 345; English sparrow, 60; redwing, 1; brown-headed cowbird, 1; cardinal, 3; common redpoll, 1 (seen at 20 yds. in flock of 50 goldfinches—R.A.S.); Am. goldfinch, 52; slate-colored junco, 48; tree sparrow, 335; swamp sparrow, 4; song sparrow, 9; snow bunting, 31. **Total,** 30 species; 1267 individuals. (Seen in area during census period: Am. golden-eye, 8; Cooper's hawk, 2; belted kingfisher, 1.)—C. Beal, Mrs. C. Elderkin, Miss A. Hiller, C. Parker, P. Lenna, L. Love, R. A. Sundell, R. H. Sundell.

67. Keuka Park, N.Y. (north end of Keuka Lake and lake front to cedarlot about 6 miles south; Keuka College woodlot and farmland; Penn Yan to Dresden on Seneca Lake and south along lake shore; Branchport, head of west branch of Keuka Lake, south 2 miles to Chasm-Lodge; marshland, open farmland, deciduous woods, cedar grove, and lake front).—Jan. 2; 9 a.m. to 4 p.m. Heavy snow-squalls early in morning, clearing before noon, bright during afternoon; temp. 28° to 38° F.; wind W, light to nearly calm in afternoon; 5-9-in. snow, drifted in spots; ponds and small bays frozen. Nine observers: 1 group of 7 in 2 cars, 2 single. Total hours, 20 (15 in car, 5 on foot). Horned grebe, 10; mallard, 2; black duck, 30; redhead, 5000; canvas-back, 35; greater scaup duck, 100; lesser scaup duck, 15; Am. golden-eye, 135; bufflehead, 2; Am. merganser, 2; Cooper's hawk, 1; sparrow hawk, 2; ring-necked pheasant, 1; Am. coot, 2; killdeer, 3; herring gull, 9; ring-billed gull, 2; mourning dove, 5; short-eared owl, 2; hairy woodpecker, 2; downy woodpecker, 10; blue jay, 6; Am. crow, 9; black-capped chickadee, 36; white-breasted nuthatch, 11; brown creeper, 1; golden-crowned kinglet, 1; starling, 500; English sparrow, 80; cardinal, 1; Am. goldfinch, 50; slate-colored junco, 11; tree sparrow, 160; song sparrow, 3; snow bunting, 10. **Total,** 35 species; about 6249 individuals.—Frank Guthrie, Ed. Bingham, Mabel Bingham, Isora Lerch, Malcom Lerch, Elaine Orcutt, Francis Orcutt, Charles Spiker, Vireo Whittaker (Keuka Park Conservation Club).

68. Manhattan Island, N.Y. (Central, Inwood, Ft. Tryon, Riverside, and Triboro Parks, 125th St. ferry and starling roost, Harlem River Speedway, and ferries in New York Bay; salt water 50%, city parks 38%, fresh-water lakes 4%, open deciduous woodland 6%, marsh 1%, city streets 1%).—Dec. 27. Partly cloudy, no precipitation; temp. 13° to 18°; wind SW to SSE, 10-20 m.p.h.; 5-7-in. snow on ground; all fresh water frozen except reservoir and 2 small streams. Ten observers in 6 parties. Total hours, 66 (60½ on foot, 5½ by ferry); total miles, 69 (52 on foot, 17 by ferry). Common loon, 1; black-crowned night heron, 1; mallard, 128; black duck, 348; redhead, 1; ring-necked duck, 1; greater scaup duck, 64; lesser scaup duck, 2 (length of wing-stripe and color of head noted at close range—G.C., A.A., A.S.); Am. golden-eye, 23; old-squaw, 3 (R.R.); Am. scoter, 8; ruddy duck, 1; Am. merganser, 18; red-breasted merganser, 8; red-tailed hawk, 1; red-shouldered hawk, 1; peregrine falcon 2; sparrow hawk, 4; ring-necked pheasant, 11; killdeer, 1; great black-backed gull, 23; herring gull, 1905 (1000 est., 905); ring-billed gull, 26; black-headed gull, 1 (from bay ferry, observer previously familiar with species—R.R.); laughing gull, 2; Bonaparte's gull, 15; little gull, 1 (from bay ferry, observer previously familiar with species—R.R.); rock dove, 1000 (est.; all these birds were roaming the parks freely and seemed to be about as wild as rock doves get in this country); long-eared owl, 1 (G.C., A.A., A.S.); short-eared owl, 1 (R.R.); screech owl, 1; belted kingfisher, 1; hairy woodpecker, 4; downy woodpecker, 29; blue jay, 12; Am. crow, 7; black-capped chickadee, 63; white-breasted nuthatch, 9; brown creeper, 4; robin, 4; starling, 45,366 (45,000 est., 366); English sparrow, 1000 (700 est., 300); red-wing, 3; purple grackle, 15; brown-headed cowbird, 2 (big starling count and almost all blackbirds at 125th St. roost); Am. goldfinch, 2; eastern towhee, 1 (J.T.); cardinal, 2; slate-colored junco, 100; tree sparrow, 12; field sparrow, 1; white-throated sparrow, 57; fox sparrow, 1; song sparrow, 50. **Total,** 54 species; about 50,348 individuals.—Arthur Aronoll, Geoffrey Carleton, Daniel Heller, Richard Gershon, Robert Merkel, Stephen Oresman, John Persico, Richard Ryan, Alfred Sutton, John Tiffany.

69. Port Chester, N.Y. (Rye and White Plains to Stamford, Conn., Manursing Island, Rye and Kensico lakes, Audubon Nature Center, etc.; open farmland 10%, town suburbs 35%, deciduous woodlots 40%, hemlock groves 3%, cattail marsh 2%, sound shore 10%).—Dec. 26; 6:15 a.m. to 5 p.m. Partly cloudy; temp. 5° to 23° to 14°; wind NW, 20 m.p.h.; ground covered with 8-10-in. crusted snow; ponds frozen, lakes open. Thirty-three observers in 8 parties, including 4 separate observers at feeding stations. Total hours, 74 (25 on foot); total miles, 195 (40 on foot, 155 by car). Red-throated loon, 4; horned grebe, 85; pied-billed grebe, 1; great blue heron, 17; mute swan, 7; Canada goose, 52; mallard, 480; black duck, 860; blue-winged teal, 1; ring-necked duck, 150; greater scaup duck, 1400; Am. golden-eye, 180; buffle-head, 43; old-squaw, 26; white-winged scoter, 300; ruddy duck, 1; hooded merganser, 14; Am. merganser, 77; red-breasted merganser, 230; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 4; bald eagle, 1; sparrow hawk, 1; ring-necked pheasant, 20; killdeer, 9; purple sandpiper, 9; great black-backed gull, 33; herring gull, 2600; ring-billed gull, 23; mourning dove, 25; barn owl, 1; screech owl, 1; horned owl, 2; barred owl, 3; belted kingfisher, 1; yellow-shafted flicker, 2; pileated woodpecker, 1; hairy woodpecker, 11; downy woodpecker, 59; blue jay, 110; Am. crow, 142; fish crow, 1 (S.M.R.); black-capped chickadee, 155; white-breasted nuthatch, 80; red-breasted nuthatch, 1; brown creeper, 15; winter wren, 1; catbird, 1; robin, 9; hermit thrush, 1; eastern bluebird, 16; golden-crowned kinglet, 9; ruby-crowned kinglet, 1; Am. pipit, 20; cedar waxwing, 7; starling, 314; myrtle warbler, 56; English sparrow, 286; purple grackle, 1; brown-headed cowbird, 10; cardinal, 10; evening grosbeak, 1 (Mrs. A.R.); purple finch, 4; pine siskin, 6; Am. goldfinch, 56; slate-colored junco, 264; tree sparrow, 207; field sparrow, 3; white-throated sparrow, 34; fox sparrow, 2; swamp sparrow, 1; song sparrow, 32; snow bunting, 2. **Total,** 74 species; 8595 individuals. (Seen in area Dec. 19, saw-whet owl, 1; Dec. 22, eastern meadowlark, 5; Dec. 27, red-wing, 2.)—Leonard J. Bradley, Dr. Stanley W. Bromley, Richard L. Burdsall, Mr. and Mrs. Wm. Bolton Cook, Glen E. Coven, John H. Dick, George Fiero, Jr., Mrs. Willis Geis, Mr. and Mrs. H. McB. Hart and family (3), Mrs. H. G. Kautzmann, Ernest T. Luhde, Elizabeth S. Manning, Ann Maples, James C. Maples, Dan McCarthy, Charles E. Mohr, John Moxhay, Arthur Nyquist, Michael Oboiko, Leslie S. Pearl, Mrs. Avery Rockefeller, J. J. Roemer, Mr. and Mrs. Stuart M. Roesler, Richard Smyth, P. Cecil Spofford, M. L. Winton, Dr. V. P. Wystrack.

70. Rochester, N.Y. (Lake Ontario shore from Manitou on Braddocks Bay east to Five Mile Line Road including Genesee River Outlet, Durand Eastman Park, Irondequoit Bay, Palmers Glen, Ellison Park, Corbetts Glen, Cobbs Hill Park, Highland Park, Mt. Hope Cemetery, Seneca Park, Reed Road, Upper and Lower Genesee River; open farmland 45%, lake and bay area 20%, public parks 15%, riverbanks and swampland 10%, deciduous woods 8%, coniferous woods 2%).—Jan. 2; 5:30 a.m. to 8:30 p.m. Clearing before noon, cloudy in afternoon, but light snow in morning and fine snow and rain in late afternoon in some sections; temp. 28° to 36° to 30°; wind W to S, 7-15 m.p.h.; ground covered with 1-6-in. snow, not crushed; all ponds 98% frozen, outlets open, lake open with ice floe ¼ mile off shore. Forty-six observers in 18 parties. Total hours, 110¼ (71¼ on foot, 39 in car); total miles, 437 (74½ on foot, 362½ in car). Common loon, 1; Canada goose, 45; mallard, 69; black duck, 600; pintail, 4; ring-necked duck, 1; greater scaup duck, 2094 (2000 est., 94); lesser scaup duck, 502 (500 est., 2); Am. golden-eye, 521; buffle-head, 15; old-squaw, 218; Am. scoter, 2; white-winged scoter, 4; ruddy duck, 3; Am. merganser, 122; red-breasted merganser, 185; sharp-shinned hawk, 2; Cooper's hawk, 1; red-tailed hawk, 8; rough-legged hawk, 11; marsh hawk, 14; sparrow hawk, 29; ring-necked pheasant, 137; Am. coot, 12; killdeer, 1 (observed in flight at Eastman Park—A.S.K.); glaucous gull, 1; Iceland gull, 1; great black-backed gull, 17; herring gull, 954; ring-billed gull, 615; Bonaparte's gull, 506 (500 est., 6); barn owl, 2 (residents, observed upper Genesee—J.W.B.); screech owl, 2; horned owl, 1; short-eared owl, 3 (2 at south edge of city—J.J.M.). (1 observed at 10 ft. at airport on airplane wing—D.B.B., W.L., D.W.); yellow-shafted flicker, 1 (L.T.); red-bellied woodpecker, 1; hairy woodpecker, 14; downy woodpecker, 59; horned lark, 40 (1 northern—D.B.B., W.L., D.W.; 39 prairies); blue jay, 9; Am. crow, 614; black-capped chickadee, 235; white-breasted nuthatch, 31; red-breasted nuthatch, 1; brown creeper, 16; winter wren, 2; robin, 2; eastern bluebird, 1 (observed at leisure in woods near Lake Ontario—D.B.B., W.L., D.W.); golden-crowned kinglet, 36; cedar waxwing, 65; northern shrike, 1; loggerhead shrike, 1 (J.L.C. and party); starling, 1068; myrtle warbler, 2 (H.M.); English sparrow, 708; red-wing, 3; cardinal, 19; purple finch, 15; Am. goldfinch, 1; slate-colored junco, 57; tree sparrow, 846; white-throated sparrow, 1; song sparrow, 20; Lapland longspur, 1 (in flock of horned larks—A.E.K., R.McK., A.B., F.R., J.B.); snow bunting, 53. **Total,** 66 species (1 additional subspecies); about 10,626 individuals.—James Barlow, Dirck Benson, Don B. Bieber, J. Warner Brown, Albert W. Bussewitz, John L. Chapin, H. Everest Clements, John J. Conway, Gertrude L. Davis, Robert Dolan, William L. G. Edson, Robert Folker, Edwin G. Foster, Helen M. Foster, Reginald Hartwell, Douglas Howland, Mr. and Mrs. Allen E. Kemnitzer, Margaret King, Mr. and Mrs. Allan S. Klonick, Walter Listman, Robert McKinney, Mr. and Mrs. Joseph McNett, Howard

Miller, Dr. and Mrs. John J. Morton, Richard O'Hara, Donald Pederson, Fred Raetz, Thomas Rowe, Oscar S. Schaeffer, Hugh Schaeffer, Elva V. Scheely, Mr. and Mrs. Robert Scholes, Ambrose M. Secker, Elmer Siebert, Walter Shields, Mrs. Fenwick Small, Joseph W. Taylor, Leo Taughe, John Weld, Paul R. Wentworth, Don Wolf (Genesee Ornithological Society and Burroughs-Audubon Nature Club).

71. Rockland County, N.Y. (same area as last year; open farmland 30%, deciduous woodland 35%, ponds and fresh-water marsh 15%, salt-water marsh 5%, coniferous woodland 5%, residential 5%, feeding stations 5%).—Jan. 2; 6:15 a.m. to 5 p.m. Clear; temp. 28° to 40° to 33°; wind N and NW, 12-20 m.p.h.; ground bare; ice only on lakes and ponds. Thirty-seven observers in 8 parties. Total hours, 69 (52 on foot, 17 by car); total miles, 305 (45 on foot, 260 by car). **Mute swan, 2; mallard, 3; black duck, 258; redhead, 10; canvas-back, 95; scaup duck (sp.), 3; Am. golden-eye, 20; buffle-head, 4; ruddy duck, 78; Am. merganser, 33; red-breasted merganser, 2; Cooper's hawk, 3; red-shouldered hawk, 4; bald eagle, 7; marsh hawk, 2; sparrow hawk, 5; ring-necked pheasant, 1; Am. coot, 11; great black-backed gull, 2; herring gull, 167; ring-billed gull, 10; mourning dove, 5; barred owl, 1; belted kingfisher, 2; yellow-shafted flicker, 9; hairy woodpecker, 10; downy woodpecker, 91; blue jay, 201; Am. crow, 991; black-capped chickadee, 425; tufted titmouse, 136; white-breasted nuthatch, 118; brown creeper, 13; winter wren, 3; robin, 6; hermit thrush, 1; eastern bluebird, 27; golden-crowned kinglet, 14; ruby-crowned kinglet, 7; starling, 266; myrtle warbler, 36; English sparrow, 204; red-wing, 2; rusty black-bird, 7; cardinal, 43; purple finch, 1; pine siskin, 5; Am. goldfinch, 215; Savannah sparrow, 13; slate-colored junco, 508; tree sparrow, 259; chipping sparrow, 4; field sparrow, 18; white-throated sparrow, 115; swamp sparrow, 11; song sparrow, 77. Total,** 56 species; 4564 individuals.—Mr. and Mrs. Stephen W. Collins, Mr. and Mrs. Wm. G. Irving, Homer S. Kelsey, Dr. R. L. Burkhart, Mildred Conrad, R. F. Deed, Vivian B. Krum, J. M. Price, Mrs. Jane Brownbridge, Mr. and Mrs. Frank Steffens, John C. Orth, John Kenney, Stanley Grierson, Peter Taylor, Fred Ulmer, Thomas C. Wilfred, Herman Kretschmar, Eugene Brown, Mrs. Earl R. Brown, Dr. Marjorie R. Hopper, Edward Kincaid, Mrs. Richard Lyman, Richard Lyman, Jr., Dorothy and Janet Lyman, Richard Carroll, Guy Deming, Eleanor Deming, Angus Deming, Sandra Mowbray-Clarke, Edward Chous, William Desmond, William VanWyck, Sylvia Ann Davies (members and guests, Rockland Audubon Society). Also feeding-station reports from Mrs. Katherine Deming, Mrs. Bruce Christen, Mrs. Norman Davis, Arthur Sauter, Mr. and Mrs. Edwin Doscher, Mr. and Mrs. Roscoe Stevens.

72. Saranac Lake—Lake Placid, N.Y. (Chubb River swamp, environs of Lake Placid village, Saranac Lake village, grounds of Trudeau Sanatorium, Saranac River to Bloomingdale, Moose Pond road, Saranac Lake airport; open farmland 20%, town suburbs 20%, river borders 10%, mixed deciduous and coniferous woodland 40%, blueberry meadows 10%).—Dec. 26; 7 a.m. to 4:30 p.m. Sunny; temp. —14° to 0° to —4°; wind SW, 1-7 m.p.h.; 4-6-in. soft snow; lakes and ponds frozen, Saranac River partly open; pine-cone crop sparse. Observers together. Total hours, 8; total miles on foot, 15. Sparrow hawk, 1; ruffed grouse, 2; pileated woodpecker, 1; hairy woodpecker, 2; downy woodpecker, 3; blue jay, 12; Am. crow, 10; black-capped chickadee, 32; white-breasted nuthatch, 6; red-breasted nuthatch, 3; starling, 12; English sparrow, 6; evening grosbeak, 42; red crossbill, 22; tree sparrow, 8; snow bunting, 38. **Total,** 16 species; 200 individuals. (Seen in area Dec. 28, golden-crowned kinglet, 12; white-throated sparrow, 1; Jan. 2, northern shrike, 1.)—Ben Branscomb, John Chapin, Gordon M. Meade.

73. Schenectady, N.Y. (same overall area as in and since 1929, with same routes as 1947).—Dec. 26; 7 a.m. to 4:30 p.m. and 7 to 8 p.m. Clear; temp. —10° to 2° to 1°; wind NW to W, strong in some areas most of time, 5-25 m.p.h.; ground covered with 2-6-in. snow, main roads clear, lesser roads crusted and drifting; normal minimum of open water. Thirty-three observers in 11 groups. Total hours, 56 (45 on foot, 11 by car); total miles, 192 (58 on foot, 134 by car). Mallard, 1; black duck, 3; Am. merganser, 1; sharp-shinned hawk, 1; sparrow hawk, 1; ruffed grouse, 4; ring-necked pheasant, 6; Am. coot, 4; mourning dove, 24 (1 flock); screech owl, 1; horned owl, 1; pileated woodpecker, 1; hairy woodpecker, 10; downy woodpecker, 40; blue jay, 52; Am. crow, 467 (300 est., 167); black-capped chickadee, 258; white-breasted nuthatch, 55; red-breasted nuthatch, 1; brown creeper, 20; robin, 2; golden-crowned kinglet, 16; starling, 839 (600 est., 239); English sparrow, 409; redpoll (sp.), 5; pine siskin, 1; Am. goldfinch, 114; slate-colored junco, 45; tree sparrow, 255; song sparrow, 7; snow bunting, 12. **Total,** 31 species; about 2656 individuals.—Mary Lou Aughenbaugh, Mrs. C. C. Bailey, Mr. and Mrs. George H. Bainbridge, Guy Bartlett, Mrs. Laura Beck, Mrs. George Bixby, Mrs. Walter E. Blowney, Mrs. R. M. Brockway, Mary Christie, W. Crawford Dunlap, Agnes Eddy, Mr. and Mrs. C. J. Grace, Mr. and Mrs. Esly Hallenbeck, Dr. Lawrence Hill, Alice Holmes, Mrs. H. G. Kelley, Mrs. W. S. McGraw, Gloria Meader, B. D. Miller, David Pelton, Stephanie Podrazik, Mrs. M. E. Rexford, Vincent J. Schaefer, Mrs. E. W. Scott, Rudolph Stone, Donald Tucker, Nelle G. Van Vorst, Leon A. Wiard, Glen Wilson, Margaret A. Smith (Schenectady Bird Club).

74. Staten Island, N.Y. (many of the undeveloped parts of the island).—Dec. 26; 8 a.m. to 5 p.m. Clear; temp. 8° at start, 18° at finish; wind WNW, 25-15 m.p.h.; ground covered with 8-18-in. snow. Observers in groups of 2, 1 alone. Total hours, 27; total miles, 33 (15 on foot, 18 by car). Horned grebe, 35; black-crowned night heron, 1; black duck, 200; greater scaup duck, 6780 (est.); Am. golden-eye, 65; buffle-head, 81; Am. merganser, 1; red-breasted merganser, 1; red-tailed hawk, 1; rough-legged hawk, 2; sparrow hawk, 5; ring-necked pheasant, 8; great black-backed gull, 5; herring gull, 5092 (est.); laughing gull, 15; Bonaparte's gull, 4; barn owl, 1; short-eared owl, 6; yellow-shafted flicker, 1; downy woodpecker, 4; horned lark, 1; blue jay, 23; Am. crow, 22; fish crow, 1; black-capped chickadee, 26; white-breasted nuthatch, 3; brown creeper, 2; catbird, 1; robin, 11; hermit thrush, 1; ruby-crowned kinglet, 4; Am. pipit, 1; starling, 131; myrtle warbler, 3; English sparrow, 34; red-wing, 20; cardinal, 17; pine siskin, 36; Am. goldfinch, 13; eastern towhee, 1; slate-colored junco, 67; tree sparrow, 100; field sparrow, 11; white-throated sparrow, 29; fox sparrow, 2; swamp sparrow, 2; song sparrow, 34. **Total,** 47 species; about 12,910 individuals.—Lee A. Ellison, Herbert Kerl, Casimir Redjives, Charles Pearson, Mathilde P. Weingartner.

75. Watertown, N.Y. (circle extending over a 7-mile radius with Public Square as center; 4 feeding stations, wooded areas 25%, evergreen swamps 20%, streets 8%, riverbanks 7%, farmland 25%, park 15%).—Dec. 26. Sunny; temp. -6° at 8 a.m. to 6° at dusk; no wind; 3-in. soft snow. Eighteen observers, 4 at feeding stations, rest in 10 parties. Total party-hours, 20; total party-miles, 25 (on foot); no car mileage counted. Ruffed grouse, 1; ring-necked pheasant, 7; herring gull, 26; screech owl, 1; hairy woodpecker, 6; downy woodpecker, 5; blue jay, 19; Am. crow, 1; black-capped chickadee, 68; white-breasted nuthatch, 6; red-breasted nuthatch, 1; brown creeper, 1; robin, 1; starling, 156; English sparrow, 174; Am. goldfinch, 18; slate-colored junco, 1; tree sparrow, 78; fox sparrow, 3; song sparrow, 5; snow bunting, 10. **Total,** 21 species; 588 individuals. (Reported same day, but outside territory: northern shrike, evening grosbeak, purple grackle, bald eagle, Am. golden-eye, rough-legged hawk.)—Mrs. Harold Besha, Mr. and Mrs. Joseph Blake, Mr. and Mrs. Frank Clinch, J. A. Common, L. Fitsimmons, Lucille Grant, Erma Schell, Wm. Schuster, Dr. Sutherland Simpson, Austin Stevens, Mr. and Mrs. R. H. Taylor, Mrs. H. H. Vrooman, A. M. Walrath, Minna A. Common.

76. Watkins Glen, N.Y. (feeding stations in Watkins Glen and Montour Falls, around end of Seneca Lake to 1 mile on each side, 1 mile along a cattail marsh, 2 miles on a road south of village, end of glen and cemetery and by car to Reading Center and on 2 farms, one 8 miles from village; 50% in village).—Dec. 28; 8:30 a.m. to 5 p.m. Cloudy at first, then sunny; temp. 32° at beginning and end; wind S, 1-7 m.p.h.; ground covered with snow; ice on end of lake and inlet, some water running in ditches. Six parties watched at home, 2 parties in cars, 3 on foot, and 2 on foot about their farms. Total hours, 20 16½ on foot, 3½ by car); total miles, 21 (14 on foot, 7 by car). Horned grebe, 4; marsh hawk, 2; ring-necked pheasant, 1; great black-backed gull, 1; herring gull, 203; ring-billed gull, 1; hairy woodpecker, 1; downy woodpecker, 19; blue jay, 12; Am. crow, 22; black-capped chickadee, 57; white-breasted nuthatch, 18; winter wren, 5; starling, 276; Am. goldfinch, 30; English sparrow, 373; cardinal, 6; slate-colored junco, 14; tree sparrow, 67; white-throated sparrow, 1; song sparrow, 2. **Total,** 21 species; 1115 individuals.—Mrs. Maurice Bardeen, Mrs. Lewis Beardsley, Howard Champion, Mrs. John Darling, Mary Dunham, Louise Helfer, Bess Hope, James Hope, Mrs. Louise Hope, Ruth Hope.

77. Boonton, N.J. (an area not exceeding a 15-mile diameter with Troy Hills the center; deciduous woodland 30%, open marsh 20%, wooded swamp 20%, pasture and farmland 15%, miscellaneous 15%).—Dec. 26; 6 a.m. to 6 p.m. Clear, cloudless most of day, visibility good; temp. 5° to 19°; wind NW, max. velocity 27 m.p.h.; reservoir open, lakes and ponds frozen, water levels below normal; ground covered with 8-in. powdered snow. Twenty-five observers in 8 parties. Total hours, 85 (60 on foot, 20 by car, 5 by boat); total miles, 175 (60 on foot, 110 by car, 5 by boat). Pied-billed grebe, 1; mute swan, 10 (wild existence); mallard, 93; black duck, 288; baldpate, 64; pintail, 2; green-winged teal, 1; wood duck, 9; redhead, 4; ring-necked duck, 2; canvas-back, 4; greater scaup duck, 12; Am. golden-eye, 14; buffle-head, 4; old-squaw, 1 (first time—F.P.W.); ruddy duck, 75; hooded merganser, 4; Am. merganser 27; sharp-shinned hawk, 3; Cooper's hawk, 2; red-tailed hawk, 11; red-shouldered hawk, 9; bald eagle, 2 (ad. and imm.); marsh hawk, 3; sparrow hawk, 6; Virginia rail, 3; Am. coot, 34; herring gull, 2; screech owl, 2; horned owl, 3; long-eared owl, 1; belted kingfisher, 1; yellow-shafted flicker, 7; red-headed woodpecker, 1; hairy woodpecker, 9; downy woodpecker, 59; horned lark (northern), 49; blue jay, 132; Am. crow, 2788 (incl. est. 2000 in roost); black-capped chickadee, 210; tufted titmouse, 86; white-breasted nuthatch, 30; red-breasted nuthatch, 1; brown creeper, 20; winter wren, 4; eastern blue-bird, 9; golden-crowned kinglet, 23; ruby-crowned kinglet, 1; Am. pipit, 60; starling, 1211; English sparrow, 349; eastern meadowlark, 1; red-wing, 29; rusty blackbird, 17; brown-headed cowbird, 1; car-

dinal, 25; evening grosbeak, 1; purple finch, 10; Am. goldfinch, 153; eastern towhee, 1; slate-colored junco, 324; tree sparrow, 1338; field sparrow, 1; white-throated sparrow, 67; fox sparrow, 13; swamp sparrow, 50; song sparrow, 238. **Total,** 67 species; about 8015 individuals.—G. Ajello, L. Ajello, C. D. Brown, T. Butler, Dr. H. V. Coes, R. Deacon, J. L. Edwards, A. E. Eynon, L. Fink, R. Frohling, R. Hagar, C. Hetzel, G. Kelly, D. Kunkle, C. Mayhood, C. Meillassoux, R. Murray, C. H. Nichols, N. Niosi, A. S. Peterson, L. Sanford, R. Thorsell, H. M. Van Deusen, H. D. Van Deusen, F. P. Wolfarth (members and guests, Urner Ornithological Club).

78. Cape May, N.J. (7½-mile radius from Rio Grande, Cape May County; salt marsh 15%, woodland 15%, cultivated land 15%, sand beach 5%, ocean and bay 50%).—Jan. 2. Cloudy in morning, clearing in afternoon; temp. 30° at start, 36° at return; wind SW, 20-25 m.p.h. Fifty-three observers in 11 parties. Total hours, 83 (56 on foot, 24 by car, 3 by rowboat); total miles, 349 (55 on foot, 288 by car, 6 by rowboat). Common loon, 22; red-throated loon, 23; horned grebe, 52; pied-billed grebe, 2 double-crested cormorant, 10; great blue heron, 37; Am. egret, 1; little blue heron, 3 (imm.); black-crowned night heron, 34; Am. bittern, 4; Canada goose, 78; brant, 2450; snow goose, 4; mallard, 16; black duck, 3078; pintail, 12; green-winged teal, 5; baldpate, 75; wood duck, 1; canvas-back, 1; greater scaup duck, 127; lesser scaup duck, 10; Am. golden-eye, 67; buffle-head, 299; old-squaw, 231; white-winged scoter, 17; surf scoter, 30; Am. scoter, 89; ruddy duck, 19; hooded merganser, 6; Am. merganser, 32; red-breasted merganser, 409; turkey vulture, 226; sharp-shinned hawk, 8; Cooper's hawk, 6; red-tailed hawk, 13; red-shouldered hawk, 5; rough-legged hawk, 1; bald eagle, 10; marsh hawk, 43; peregrine falcon, 1; sparrow hawk, 22; bob-white, 12; clapper rail, 2; Virginia rail, 2; Am. coot, 5; killdeer, 32; black-bellied plover, 20; woodcock, 1; Wilson's snipe, 3; greater yellow-legs, 3; purple sandpiper, 17; least sandpiper, 1; red-backed sandpiper, 3486; semipalmated sandpiper, 4; sanderling, 390; great black-backed gull, 26; herring gull, 2780; ring-billed gull, 419; Bonaparte's gull, 377; mourning dove, 72; screech owl, 1; horned owl, 4; barred owl, 1; short-eared owl, 7; saw-whet owl, 1 (found in weakened condition on sand dunes by M. A. Linton and party, Jan. 1, and rediscovered by J. K. Potter and party, dead, on Jan. 2); belted kingfisher, 2; yellow-shafted flicker, 23; red-bellied woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 20; horned lark, 359; blue jay, 26; Am. crow, 1702; fish crow, 47, Carolina chickadee, 111; tufted titmouse, 26; winter wren, 2; Carolina wren, 20; long-billed marsh wren, 2; short-billed marsh wren, 1; mockingbird, 1; catbird, 8; brown thrasher, 2; robin, 457; hermit thrush, 16; eastern bluebird, 30; golden-crowned kinglet, 6; ruby-crowned kinglet, 2; Am. pipit, 1000; cedar waxwing, 43; starling, 4165; myrtle warbler, 1918; palm warbler (western), 19; ovenbird, 1 (observed at close range for 10 minutes under ideal conditions—W. Middleton); English sparrow, 504; eastern meadowlark, 196; red-wing, 2715; rusty blackbird, 313; purple grackle, 196; brown-headed cowbird, 1551; cardinal, 91; purple finch, 14; Am. goldfinch, 331; eastern towhee, 26; Ipswich sparrow, 4; Savannah sparrow, 24; sharp-tailed sparrow, 5; seaside sparrow, 2; vesper sparrow, 7; slate-colored junco, 213; tree sparrow, 150; field sparrow, 23; white-throated sparrow, 383; fox sparrow, 21; swamp sparrow, 8; song sparrow, 93. **Total,** 117 species; about 32,149 individuals. (Seen in area Jan. 1: a pair of king eiders by M. A. Linton and party.)—P. Street, Q. Kramer, N. McDonald, C. Wonderly, F. Ulmer, P. Schwalbe, R. D. Twining, D. Whitten, J. Wilson, R. Thomas, W. Savory, E. Choate, A. Zaid, E. Finkel, J. Jacobs, L. Corn, D. Batezel, F. Reamer, W. Middleton, W. Fries, R. Haines, E. Ward, F. McLaughlin, P. Marvin, J. B. Austin, J. H. Austin, E. Weyl, R. Darby, J. Cadbury, W. Corson, J. McIlvain, B. Satterthewaite, G. Reynaud, J. K. Potter, E. Archer, M. A. Linton, C. Reagan, A. Nicholson, Jr., E. Marshall, E. Marshall, Jr., W. Wright, J. Meyers, Wildman, L. Darlington, E. Reiman, D. Rutherford, E. Manners, B. Joyce, J. Erickson, M. McCutcheon, I. Zeidman, W. Sheldon, D. Coman (Delaware Valley Ornithological Club).

79. Elizabeth, N.J. (Newark Bay across Newark meadows and north Elizabeth to Kean's woods; bay front 15%, salt meadows 20%, fresh-water meadows 20%, garbage dumps 5%, suburbs 15%, deciduous woods 20%, scrubby fields 5%).—Dec. 27; 6:30 a.m. to 5 p.m. Clear; temp. 3° to 20°; wind NW, 8-12 m.p.h.; ground covered with 8-14-in. snow; fresh water frozen. Two observers together. Total hours, 9½; total miles, 10 (on foot). Black duck, 26; scaup duck (sp.), 200; Am. golden-eye, 6; Am. merganser, 9; sharp-shinned hawk, 1; red-tailed hawk, 2; marsh hawk, 2; sparrow hawk, 2; ring-necked pheasant, 2; herring gull, 271; short-eared owl, 12; yellow-shafted flicker, 1; downy woodpecker, 3; horned lark (northern), 18; blue jay, 2; black-capped chickadee, 3; tufted titmouse, 1; white-breasted nuthatch, 1; Am. pipit, 1; starling, 84; English sparrow, 30; eastern meadowlark, 3; red-wing, 2; cardinal, 3; Am. goldfinch, 5; slate-colored junco, 3; tree sparrow, 180; white-throated sparrow, 6; song sparrow, 18.. **Total,** 29 species, 897 individuals—John Crowell, Jack Wolf.

80. Great Swamp–Watchung Ridges, N.J. (7½-mile radius from New Providence; dry deciduous woods 50%, fields 25%, wet deciduous woods

10%, suburban areas 10%, evergreen woods 5%).—Dec. 26; 7 a.m. to 5:30 p.m. Sunny and cold; temp. 5° to 10° F.; wind W, 25-30 m.p.h.; ground covered with 3-9-in. snow; ponds and streams frozen. Twenty observers in 7 parties; also day-long observations at feeding stations by 43 members of the Summit and Chatham Nature Clubs. Total party-hours, 60; total party-miles, 65 (45 on foot, 20 by car). Canada goose, 1; mallard, 12; black duck, 37; sharp-shinned hawk, 2; red-tailed hawk, 5; red-shouldered hawk, 4; sparrow hawk, 3; bobwhite, 5; ring-necked pheasant, 4; herring gull, 1; mourning dove, 13; screech owl, 1; yellow-shafted flicker, 2; yellow-bellied sapsucker, 1; hairy woodpecker, 18; downy woodpecker, 106; blue jay, 255; Am. crow, 113; black-capped chickadee, 289; tufted titmouse, 134; white-breasted nuthatch, 90; red-breasted nuthatch, 1; brown creeper, 11; hermit thrush, 1; eastern bluebird, 4; golden-crowned kinglet, 22; ruby-crowned kinglet, 5; starling, 485; myrtle warbler, 63; English sparrow, 663; eastern meadowlark, 7; red-wing, 1; cardinal, 72; purple finch, 3; Am. goldfinch, 67; eastern towhee, 6; slate-colored junco, 762; tree sparrow, 820; chipping sparrow, 4 (J.N., W.S.); field sparrow, 18; white-throated sparrow, 151; fox sparrow, 9; swamp sparrow, 3; song sparrow, 143. **Total,** 44 species; about 4417 individuals.—Edward Chalif, Mrs. Cisne, G., P., and R. Davenport, Gus Daniels, W. Ellis, David Fables, James Hand, James B. Hawley, Mrs. Miller, J. d'Arcy Northwood, Herbert Rebell, Millie Schaughency, Russell Sieder, Mrs. C. B. Stoner, Lois Wenman, Ethel and Glen Woolfenden, Jerry Wright.

81. Hackensack, N.J. (center of town to a point 7 miles north; Johnson Park area along west bank of the Hackensack River to Route 4 and Maple Springs, east bank Pomander Walk; Oradell Reservoir area south shore, dam area, southeast and northwest shore; center of town to point 7 miles northwest; Howland Avenue, River Edge, Cholowinski's farm, Bethel Cemetery, Paramus; center of town to point 4½ miles east to south; Teaneck dumps Route 4; Leonia dumps at Overpeck Creek, east and west banks; Little Ferry dumps at Overpeck Creek; Little Ferry dumps at Mehrhof Lake and Hackensack River, and Craig Ave. Moonachie; open farmland 10%, town suburbs 20%, deciduous woodlots 20%, coniferous woodlots 10%, cattail marsh 40%).—Jan. 2; 7:30 a.m. to 4 p.m. Partly cloudy; temp. 22° to 38°; wind W to NW, 5-10 m.p.h.; ground covered with 3-4-in. snow; all swamp areas frozen, salt water open, reservoir partly covered. Fourteen observers in 6 parties. Total hours, 51 (48½ on foot, 1½ in car); total miles, 33 (16 on foot, 17 by car). Canada goose, 12; mallard, 321; black duck, 471; ruddy duck, 3; Am. merganser, 67; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 8; red-shouldered hawk, 2; marsh hawk, 3; sparrow hawk, 5; Am. coot, 1; herring gull, 522 (500 est., 22); ring-billed gull, 17; laughing gull, 1; mourning dove, 25; screech owl, 1; belted kingfisher, 2; hairy woodpecker, 4; downy woodpecker, 25; horned lark, 1; blue jay, 52; Am. crow, 95; black-capped chickadee, 72; tufted titmouse, 3; white-breasted nuthatch, 9; red-breasted nuthatch, 1; brown creeper, 3; winter wren, 2; eastern bluebird, 11; Am. pipit, 20; starling, 8103 (8000 est., 103); myrtle warbler, 34; English sparrow, 96; redwing, 17; rusty blackbird, 15; brown-headed cowbird, 2; cardinal, 2; purple finch, 1; Am. goldfinch, 262; vesper sparrow, 18; slate-colored junco, 154; tree sparrow, 335; field sparrow, 2; white-crowned sparrow, 1; white-throated sparrow, 58; fox sparrow, 3; swamp sparrow, 5; song sparrow, 117. **Total,** 49 species; about 10,986 individuals. (Seen in area Dec. 26, long-billed marsh wren, 1; golden-crowned kinglet, 1; ruby-crowned kinglet, 1; Dec. 31, purple grackle, 1.)—Mr. and Mrs. J. K. Boldtmann, D. Conway, R. Deacon, C. Demarest, W. Downin, F. Elliot, J. Gorman, W. Gorman, W. Kross, J. Mann, D. Pallas, L. C. Siess, L. J. Siess.

82. Lakehurst, N.J. (Point Pleasant to Toms River, Lakehurst and Lakewood; pine woods 50%, deciduous woods 20%, cultivated land 10%, cedar swamps 5%, sand beach 5%, salt marsh 5%, towns 5%).—Dec. 30; 7 a.m. to 4:30 p.m. Rain all day; temp. 45° to 55°; wind NE, 15-30 m.p.h.; patches of snow in woods; ponds partially ice-covered, streams open. Nine observers in 2 parties. Total party-hours, 14; total party-miles, 125 (117 by car, 8 on foot). Common loon, 2; red-throated loon, 4; horned grebe, 11; gannet, 2; double-crested cormorant, 4; great blue heron, 3; mallard, 59; black duck, 138; European widgeon, 1; baldpate, 125; shoveller, 2; ring-necked duck, 1; scaup duck (sp.), 8; Am. golden-eye, 41; buffle-head, 20; old-squaw, 9; white-winged scoter, 7; surf scoter, 1; ruddy duck, 54; hooded merganser, 1; red-breasted merganser, 73; red-shouldered hawk, 1; sparrow hawk, 1; ring-necked pheasant, 1; clapper rail, 1; Virginia rail, 1; Am. coot, 23; killdeer, 2; purple sandpiper, 1; great black-backed gull, 53; herring gull, 600 (est.); ring-billed gull, 31; Bonaparte's gull, 1; rock dove, 5 (feral birds which have bred in the wild state at Lakehurst for years); mourning dove, 1; belted kingfisher, 1; horned lark (northern), 7; blue jay, 4; Am. crow, 36; Carolina chickadee, 27; white-breasted nuthatch, 2; brown creeper, 1; robin, 21; starling, 37; myrtle warbler, 23; English sparrow, 12; cardinal, 3; purple finch, 3; pine siskin, 120; Savannah sparrow, 4; slate-colored junco, 46; tree sparrow, 47; white-throated sparrow, 30; swamp sparrow, 1; song sparrow, 9. **Total,** 55 species; about 1722 individuals.—John Crowell, David Fables, Richard Johnson, Isabell Meyer, Russell Sieder, Paul Shubeck, Jack Wolf, Glen and Lester Woolfenden.

83. Long Branch, N.J. (Oceanport to Wreck Pond; residential area 5%, beach front 20%, farmland 10%, woods 20%, bushy fields and marshes 10%, bays and ponds 35%).—Jan. 2; 5 a.m. to 5 p.m. Snow squalls in forenoon, later clearing and sunny; temp. 27° at start, 38° at return; wind W, 10-15 m.p.h.; 2-in. snow on ground, ponds open. Fourteen observers in 6 parties. Total hours, 58 (30 on foot); total miles, 180 (150 by car, 30 on foot). Common loon, 4; red-throated loon, 31; horned grebe, 14; pied-billed grebe, 7; gannet, 12; double-crested cormorant, 4; great blue heron, 6; black-crowned night heron, 1; Canada goose, 24; blue goose, 1 (adult with white neck, found Jan. 1 by I.H.B. and G.M.S., and seen on day of count by at least 10 observers); mallard, 140; black duck, 730 (± 50); gadwall, 1 (C.D.B., J.L.E., A.E.E.); European widgeon, 2; baldpate, 375 (± 25); pintail, 1; redhead, 14; ring-necked duck, 12; canvasback, 18; scaup duck, 1500 (± 100) (both forms identified); Am. golden-eye, 89; buffle-head, 3; old-squaw, 21; white-winged scoter, 1; ruddy duck, 52; Am. merganser, 170; red-breasted merganser, 55; turkey vulture, 1; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 3; marsh hawk, 1; sparrow hawk, 13; ring-necked pheasant, 6; king rail, 1 (freshly killed, skin now in Newark Museum); Am. coot, 67; killdeer, 7; great black-backed gull, 400 (± 25); herring gull, 2100 (± 200); ring-billed gull, 16; Bonaparte's gull, 200; dovekie, 1 (dead, oiled, otherwise in good condition); mourning dove, 17; screech owl, 1; belted kingfisher, 3; yellow-shafted flicker, 7; hairy woodpecker, 1; downy woodpecker, 25; horned lark, 11; blue jay, 22; Am. crow, 170; Carolina chickadee, 100; tufted titmouse, 17; white-breasted nuthatch, 3; brown creeper, 7; winter wren, 2; catbird, 1; robin, 79; Am. pipit, 1; cedar waxwing, 2; starling, 1000 (± 50); myrtle warbler, 67; English sparrow, 185 (± 25); red-wing, 63; rusty blackbird, 2; purple grackle, 1; brown-headed cowbird, 210; cardinal, 33; purple finch, 2; pine siskin, 135; Am. goldfinch, 115; eastern towhee, 5; slate-colored junco, 44; tree sparrow, 18; field sparrow, 8; white-throated sparrow, 44; swamp sparrow, 2; song sparrow, 16. **Total,** 80 species; about 8561 individuals. —H. P. Bennett, I. H. Black, C. D. Brown, J. L. Edwards, B. J. Einhorn, A. E. Eynon, J. E. Gorham, C. Hetzel, N. Niosi, H. G. Seeley, J. Wolf, Ethel Woolfenden, G. Woolfenden, G. M. Seeley (members and guests, Urner Ornithological Club).

84. Moorestown, Maple Shade, and Riverton, N.J. (Delair to Delanco along Delaware, Maple Shade, Moorestown, Mt. Laurel, Hartford and Bridgeboro; open farmland 30%, town suburbs 23%, deciduous woods 21%, river-front 14%, wet brushy meadows 7%, evergreen woods 3%, wet woods 2%).—Dec. 26; dawn to dusk. Clear; temp. 10° to 24°; wind NW, 0-24 m.p.h.; ground covered with 3-6-in. crusted snow; still water frozen. Thirty-three observers in 18 parties. Total hours, 55 (28¼ on foot, 10 by car, 16¾ at feeding stations); total miles, 145 (30 on foot, 115 by car). Great blue heron, 2; mallard, 21; black duck, 686; baldpate, 12; pintail, 300; scaup duck (sp.), 4; buffle-head, 1; Am. merganser, 217; turkey vulture, 6; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 1; rough-legged hawk, 1; marsh hawk, 2; sparrow hawk, 9; ring-necked pheasant, 3; killdeer, 3; herring gull, 332; ring-billed gull, 1; mourning dove, 18; screech owl, 1; horned owl, 2; long-eared owl, 1; belted kingfisher, 1; yellow-shafted flicker, 8; hairy woodpecker, 2; downy woodpecker, 29; horned lark, 100; blue jay, 65; Am. crow, 2459; fish crow, 3; chickadee (probably mostly Carolina), 59; tufted titmouse, 18; white-breasted nuthatch, 11; red-breasted nuthatch, 1; brown creeper, 2; winter wren, 1; Carolina wren, 2; mockingbird, 2; golden-crowned kinglet, 56; starling, 299; myrtle warbler, 1; English sparrow, 258; eastern meadowlark, 42; rusty blackbird, 6; purple grackle, 1; cardinal, 76; Am. goldfinch, 82; eastern towhee, 4; vesper sparrow, 5; slate-colored junco, 353; tree sparrow, 198; chipping sparrow, 1; field sparrow, 3; white-throated sparrow, 296; swamp sparrow, 1; song sparrow, 100. **Total,** 58 species; 6171 individuals. —Sarah Aldridge, Irene and Herman F. Anders, Helen and Mary Louise Baker, Alfred and Alyce Borton, W. Lowell and Bessie Cleaver, Frances Conrow, Charles and William Bacon Evans, Meribah Gardiner, Elizabeth Gillingham, Mary Elizabeth Glassey, Robert Haines, Wendell and Mary Hinkey, Helena Jones, M. Albert and Margaret Linton, Anna W. H. Lippincott, Elizabeth Lippincott, Percy Lovell, Philip Marvin, James and Helen Moore, Leonard Morgan, A. Nicholson, Jr., David Niederhauser, Chester L. Reagan, John F. Salmon, Jr., Joseph Taylor.

85. Mount Holly, N.J. (center of 7½-mile circle 3 miles west of Mount Holly; open farmland 60%, farm woodlots 15%, stream bottomlands 10%, town suburbs 10%, Delaware River edge 5%).—Dec. 27; 6:45 a.m. to 5 p.m. Clear; temp. 11° to 18° to 19°; wind W to SW, 13-18 m.p.h.; ground covered with 4-6-in. crusted snow; all streams frozen, some floating ice on Delaware River. Two observers together. Total hours, 9¼ (5 in car, 4¼ on foot); total miles, 85 (70 by car, 15 on foot). Horned grebe, 2; mallard, 8; black duck, 475; pintail, 18; green-winged teal, 6; lesser scaup duck, 45; Am. golden-eye, 1; Am. merganser, 146; turkey vulture, 23; sharp-shinned hawk, 1; red-tailed hawk, 2; marsh hawk, 1; sparrow hawk, 2; killdeer, 2; herring gull, 41; mourning dove, 12; screech owl, 1; belted kingfisher, 3; hairy woodpecker, 2; downy woodpecker, 11; horned lark, 400 (± 25); blue jay, 29; Am. crow, 600 (± 25); Carolina chickadee,

20; tufted titmouse, 14; white-breasted nuthatch, 4; brown creeper, 3; winter wren, 1; catbird, 1; golden-crowned kinglet, 18; Am. pipit, 1; starling, 43; myrtle warbler, 8; palm warbler, 4 (studied by both observers for about 15 minutes at 15-20 ft.; characteristic 'pumping' of the tail and *white* eye-line noted); English sparrow, 35; eastern meadowlark, 7; red-wing, 2; brown-headed cowbird, 12; cardinal, 26; Am. goldfinch, 55; vesper sparrow, 6 (together); slate-colored junco, 200 (± 10); tree sparrow, 475 (± 25); white-throated sparrow, 525 (± 25); fox sparrow, 1; song sparrow, 9. **Total,** 46 species; 3301 individuals.—Nelson D. W. Pumyea, Elmer E. Highley.

86. Princeton, N.J. (within a 9¼-mile diameter; villages, estates, farms, lowland and upland deciduous woods, and red-cedar groves).—Dec. 26; dawn till dark. Brilliantly clear; temp. 10° to 20°; wind N, light; ground covered with up to a foot of snow; all water frozen except lower Millstone River. Ten observers in 6 parties, and 4 at 3 food-stations. Total hours afield, 55 (54 on foot, 1 in car); total miles, 64¾ (61¾ on foot, 3 in car). Whistling swan, 4 (1 ad., first Princeton record, first seen Dec. 12, repeatedly since by numerous observers, at times close enough to see yellow on lores, always with 1 or more mute swans; 3 seen flying rather low overhead by R.R.L. and believed by him to be this species as bills appeared black and they called continuously); Canada goose, 30; mallard, 85; Am. merganser, 10; sharp-shinned hawk, 4; Cooper's hawk, 2; red-tailed hawk, 4; red-shouldered hawk, 3; bald eagle, 1 (ad.); sparrow hawk, 6; herring gull, 1 (ad.); mourning dove, 15; barn owl, 1 (and 3 freshly killed, same barn); belted kingfisher, 1; yellow-shafted flicker, 31; hairy woodpecker, 11; downy woodpecker, 72; horned lark, 160; blue jay, 96; Am. crow, 284; fish crow, 1; chickadee, 64 (most black-capped, at least 6 Carolina); tufted titmouse, 92; white-breasted nuthatch, 37; red-breasted nuthatch, 1; brown creeper, 17; winter wren, 3; Carolina wren, 3; catbird, 2; brown thrasher, 1; robin, 3; hermit thrush, 1; eastern bluebird, 39; golden-crowned kinglet, 6; ruby-crowned kinglet, 2; Am. pipit, 5 (F.W.L.); starling, 388; myrtle warbler, 136; English sparrow, 452; eastern meadowlark, 29; red-wing, 1; rusty blackbird, 4; purple grackle, 1; cardinal, 75; purple finch, 10; Am. goldfinch, 240; eastern towhee, 9 (4 ♂, 4 ♀, 1—); slate-colored junco, 365; tree sparrow, 305; field sparrow, 15; white-throated sparrow, 270; swamp sparrow, 4; song sparrow, 93. **Total,** 54 species; about 3495 individuals. (Seen in area Jan. 2, all ice gone: horned grebe, 1; black duck, 8; baldpate, 6; pintail, 1 ♂; green-winged teal, 1.) Number of towhees, especially of females, remarkable.—E. D. Bloor, Jr., E. T. Goodridge, R. R. Law, F. W. Loetscher, Jr., A. D., A. F. and J. K. Meritt, Peter Mott, B. S. Ridgely, C. H., M. S. and W. S. Rogers, A. B. Schultz, Jr., A. L. Shinn.

87. Raritan Estuary, N.J. (circle centered at Bonhamtown as in former years; open farmland 30%, fresh-water swamps 5%, swampy woods 10%, deciduous woods 10%, pine barrens 15%, salt meadows 20%, towns and suburbs 10%).—Dec. 28; 6 a.m. to 5 p.m. Ground mist at dawn and sunset, otherwise clear, visibility to horizon; temp. 10° to 40° to 28°; no wind most of day, occasionally light (less than 7 m.p.h.) W; ground generally covered with old snow up to 18 in. deep; most still water frozen; Raritan River choked with drifting ice; margin of bay frozen. Fifteen observers in 9 parties. Total hours, 65; total miles, 59 on foot. Pied-billed grebe, 1; mallard, 4; black duck, 138; baldpate, 3; pintail, 5; wood duck, 1; canvas-back, 1; greater scaup duck, 2653 (2000 est., 653); Am. golden-eye, 95; buffle-head, 47; old-squaw, 11; Am. scoter, 1; ruddy duck, 1; red-breasted merganser, 4; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 8; red-shouldered hawk, 6; rough-legged hawk, 2; marsh hawk, 11; pigeon hawk, 2 (1 seen at 100 ft. chasing tree sparrow; slaty-blue back, light breast markings, no conspicuous face markings; very small size—D.F.; 1 seen through 7x50 binoculars from bluff at 200 yards, flying extremely fast over salt meadows; uniformly brown back and heavy breast streaking clearly seen; too small for peregrine, characteristic flight noted—G.C.); sparrow hawk, 9; ring-necked pheasant, 6; Am. coot, 1; killdeer, 7; great black-backed gull, 9; herring gull, 190; ring-billed gull, 7; rock dove, 11 (feral, on public buildings); screech owl, 1; horned owl, 1; short-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 1; hairy woodpecker, 6; downy woodpecker, 42; horned lark (northern), 112; blue jay, 155; Am. crow, 4500 (978 in daytime, 4500 est. in roost); fish crow, 49; black-capped chickadee, 82; Carolina chickadee, 21; tufted titmouse, 57; white-breasted nuthatch, 32; brown creeper, 8; winter wren, 2; Carolina wren, 1; mockingbird, 2; robin, 13; eastern bluebird, 1; golden-crowned kinglet, 10; Am. pipit, 29; northern shrike, 1; starling, 50,000 [2747 (1500 est., 1247) in daytime, 50,000 est. in roost]; myrtle warbler, 191; English sparrow, 324; eastern meadowlark, 14; red-wing, 12,000 (15 in daytime, 12,000 est. in roost); rusty blackbird, 1; purple grackle, 5000 (4 Stone's and 3 bronzed in daytime, 5000 est. in roost); brown-headed cowbird, 4000 (17 in daytime, 4000 est. in roost); cardinal, 25; Am. goldfinch, 95; eastern towhee, 2; Savannah sparrow, 4; vesper sparrow, 1; slate-colored junco, 110; tree sparrow, 817; field sparrow, 14; white-throated sparrow, 27; fox sparrow, 2; swamp sparrow, 24; song sparrow, 145. **Total,** 73 species (1 additional subspecies); about 81,461 individuals.—Clarence D. Brown, Gilbert Cant, Edward L. Chalif, Robert C. Conn, John Crowell, George G. Daniels, David Fables, John P. Gee, Charles A. Hetzel, John T. S. Hunn, George Kelly, W. James Kennedy, Lloyd Sandford, Edwin I. Stearns, Jack Wolf (Urner Ornithological Club).

88. Ridgewood, N.J. (same area as in previous years, from Ramsey and Piermont south to Radburn and east to Hudson River; open fields and farmland 35%, deciduous woodland 30%, hemlock woods 10%, fresh-water streams and marsh 15%, brush 7%, feeding stations 3%).—Dec. 29; 8 a.m. to 4:30 p.m. Rain and sleet all day; heavy fog; ground partly snow-covered; temp. 30° to 45°; wind 15-40 m.p.h.; fresh-water ponds frozen. Thirty observers in 8 parties. Total party-hours, 36; total party-miles 32 (on foot). Canada goose, 14; black duck, 37; Am. golden-eye, 30; Am. merganser, 1; goshawk, 1; sharp-shinned hawk, 2; red-shouldered hawk, 1; marsh hawk, 1; ruffed grouse, 2; ring-necked pheasant, 2; herring gull, 51; mourning dove, 33; screech owl, 1; horned owl, 1; belted kingfisher, 2; yellow-shafted flicker, 1; hairy woodpecker, 9; downy woodpecker, 67; horned lark, 3; blue jay, 150; Am. crow, 68; black-capped chickadee, 192; tufted titmouse, 76; white-breasted nuthatch, 68; red-breasted nuthatch, 3; brown creeper, 5; winter wren, 1; Carolina wren, 1; catbird, 1; robin, 3; hermit thrush, 3; eastern bluebird, 17; golden-crowned kinglet, 2; ruby-crowned kinglet, 1; starling, 144; myrtle warbler, 21; English sparrow, 311; cardinal, 26; evening grosbeak, 1; purple finch, 37; Am. goldfinch, 57; eastern towhee, 5; vesper sparrow, 1; slate-colored junco, 293; tree sparrow, 331; white-throated sparrow, 135; fox sparrow, 2; swamp sparrow, 2; song sparrow, 38. **Total,** 49 species; 2257 individuals.—Mrs. H. E. Carnes, Mrs. R. H. Cubberly, Mrs. J. Y. Dater, Jr., Mrs. F. C. Dunham, Dr. Anne Dunham, Mrs. N. Emig, Mrs. G. B. Fetter, Mrs. H. Gaede, Mrs. C. J. Kientzler, Mr. and Mrs. C. K. Nichols, Mrs. H. McEntee, Mrs. H. E. Rowlands, Alfred Runk, Mrs. J. VanSaun, Peter Vail, Mrs. R. Watts, Phillip H. Grosch, Chas. Anderson, Fred Russell, Bruce Holt, Alfred Johnson, Frank Johnson, Thomas Jordan, Joseph Brewer, James Brewer, Edward Vincent, Dale Dreisbach, Edward Jette, Robert Sugden (Ridgewood Audubon Society and Radburn Troop, Boy Scouts).

89. Allentown, Pa. (Lake Muhlenberg, Trexler Memorial Park, 8 miles west to Trexlertown, then 3 miles WNW to bird-banding station; swampland 60%, pine grove 20%, small ponds 5%, open farmland 5%, deciduous woodlot 10%).—Jan. 2; 8 a.m. to 4 p.m. Overcast; temp. 30°; wind NW, 10-28 m.p.h.; large areas covered with old snow. Twelve observers (in 2 parties part of time). Total hours, 8½ (8 on foot, ½ by car); total miles, 56 (16 on foot, 40 in car). Mallard, 110; black duck, 95; baldpate, 1; pintail, 4; green-winged teal, 5; redhead, 1; ring-necked duck, 1; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 1; marsh hawk, 1; sparrow hawk, 1; ring-necked pheasant, 6; mourning dove, 1; belted kingfisher, 1; yellow-shafted flicker, 1; downy woodpecker, 6; blue jay, 12; Am. crow, 32,128 (32,000 est., 128); black-capped chickadee, 12; tufted titmouse, 9; white-breasted nuthatch, 4; brown creeper, 1; golden-crowned kinglet, 16; starling, 214; myrtle warbler, 2; English sparrow, 362; eastern meadowlark, 1; rusty blackbird, 3 (positively identified; first winter record—C.E.M.); cardinal, 11; Am. goldfinch, 24; slate-colored junco, 73; tree sparrow, 3; white-throated sparrow, 2; song sparrow, 3. **Total,** 35 species; about 33,117 individuals.—Ann Petok, Ruth M. Farr, Mrs. L. B. Burkhardt, Marion T. Barnes, Bruce Laub, Joseph Laub, Catherine Barlieb, Wm. M. Stauffer, Jr., John E. Trainer, Earl E. Montgomery, Neil E. Montgomery, Carl E. Montgomery (Lehigh Valley Bird Club).

90. Clairton, Pa. (precipitous slopes of City Park; Peters Creek bottoms and adjacent hillsides to vicinity of Large, thence by circuitous route northward through Jefferson Township to Coal Valley, and homeward by Solar Fuel mine; open farmland 20%, town suburbs 35%, deciduous woodlands 45%).—Jan. 1; 9 a.m. to 5 p.m. Cloudy except for short periods in p.m.; temp. 28° to 34°; wind WNW, 25-38 m.p.h.; ground covered with ½-in. snow; streams open; ponds frozen. Total hours, 8 (on foot); total miles, 9 (on foot). Hairy woodpecker, 1; downy woodpecker, 1; black-capped chickadee, 9; tufted titmouse, 7; Carolina wren, 1; starling, 20; English sparrow, 64; cardinal, 24; slate-colored junco, 18; song sparrow, 3. **Total,** 10 species; 148 individuals. (Ring-necked pheasant tracks observed in the snow in corn field.)—Ellis H. Shimp.

91. Deer Creek (Allegheny Co.), Pa. (Denny's Pond to Carson's, both sides of creek; Allegheny River, Hulton bridge to upper end of Fourteen Mile Island; some outlying sections covered by 1 party by car; deciduous woodland 75%, open farmland 15%, marsh 5%, urban territory 5%).—Jan. 2; 8 a.m. to 3 p.m. Clear except for a few light fleecy clouds; temp. 28° to 40°; wind 15-20 m.p.h.; ground covered with 1-in. snow; river high and free from ice. Eleven observers in 4 parties. Total hours, 28 (26 on foot, 2 by car); total miles, 38 (19 on foot, 19 by car). Mallard, 8; black duck, 104; redhead, 1; canvas-back, 3; red-shouldered hawk, 1 (a pair has nested in vicinity for several years); ruffed grouse, 1; yellow-shafted flicker, 2; pileated woodpecker, 1 (seen perched and flying; viewed at about 50 yds. for several minutes with 6X glasses—J.R.S., G.E.M., C.R.M., J.E.D.); hairy woodpecker, 2; downy woodpecker, 23; Am. crow, 3; black-capped chickadee, 112; tufted titmouse, 39; white-breasted nuthatch, 23; golden-crowned kinglet, 13; starling, 62; English sparrow, 48; cardinal, 31; slate-colored junco, 117; tree sparrow, 78; song sparrow, 23. **Total,** 21 species; 695 in-

dividuals. (Nine Am. golden-eyes and 65 additional black ducks seen on the river, Dec. 28. The pileated woodpecker is the first ever reported here, although this territory has been visited frequently by our Audubon members for the last 30 years.)—J. Reed Longdon, V. J. Gobert, R. A. Hawker, R. G. Russell, C. S. Taylor, John R. Sisley, G. E. Michels, C. R. Manley, J. E. Devine, C. R. Manley, Jr., C. H. Manley.

92. Elverson (Chester Co.), Pa. (7½-mile radius from Marsh P. O.; cedar groves and thickets 15%, meadows and swampland 15%, deciduous woods 30%, upland fields 40%).—Dec. 31, 8:30 a.m. to 4 p.m. Overcast; temp. 26° to 28°; wind 20-30 m.p.h.; 2-in. snow on ground; marshes and small ponds frozen. Ten observers in 3 parties. Total hours, 35 (afoot); total miles, 30 (afoot); cars used only for rapid transportation. Mallard, 2; turkey vulture, 4; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 3; rough-legged hawk, 2; marsh hawk, 2; sparrow hawk, 7; ring-necked pheasant, 4; Wilson's snipe, 5; mourning dove, 13; long-eared owl, 5; yellow-shafted flicker, 5; hairy woodpecker, 2; downy woodpecker, 11; horned lark, 150; blue jay, 7; Am. crow, 310; black-capped chickadee, 8; tufted titmouse, 12; white-breasted nuthatch, 2; brown creeper, 1; winter wren, 1; robin, 1; eastern bluebird, 4; golden-crowned kinglet, 16; ruby-crowned kinglet, 1; Am. pipit, 1; starling, 555; English sparrow, 275; eastern meadowlark, 27; red-wing, 2; brown-headed cowbird, 15; cardinal, 42; purple finch, 1; Am. goldfinch, 19; slate-colored junco, 510; tree sparrow, 235; white-throated sparrow, 21; song sparrow, 19. **Total,** 40 species; about 2304 individuals.—Robert Cook, Barry Kruppenbach, Lynn Sagner, Eugene Hollinger, Ruth Mary Wagner, Arlene Wagner, Louella Beiler, Gladys Beiler, Ira Amole, Arthur Sigman.

93. Glenolden (Delaware Co.), Pa. (Chester, Ridley Crum and Darby Creek valleys, Darby Creek marshes near Delaware River, Springton Reservoir; Little Tinicum Island territory in Delaware River, point of duck concentration last year, not covered this year due to bad weather; deciduous woodland 25%, uncultivated fields 25%, town suburbs 25%, open farmland 10%, pine woods 5%, marshes 5%, water 5%).—Jan. 1; 8 a.m. to 6:30 p.m. Moderate snow; temp. 28° to 35° to 30°; wind WNW to NW, 15-25 m.p.h.; all water clear of ice. Fourteen observers in 7 parties. Total hours, 32 (22 on foot, 10 by car); total miles, 116 (90 by car, 26 on foot). Pied-billed grebe, 4; mallard, 34; black duck, 285; baldpate, 1; pintail, 1102; green-winged teal, 2; ring-necked duck, 14; buffle-head, 2; ruddy duck, 512; Am. merganser, 31; sharp-shinned hawk, 2; Cooper's hawk, 2; red-tailed hawk, 6; red-shouldered hawk, 1; rough-legged hawk, 5; bald eagle, 1; marsh hawk, 4; sparrow hawk, 2; ring-necked pheasant, 4; killdeer, 1; herring gull, 220; ring-billed gull, 14; mourning dove, 1; barn owl, 1 (fledgling calling from nest—J.A.G., M.G.); yellow-shafted flicker, 2; hairy woodpecker, 5; downy woodpecker, 18; blue jay, 5; Am. crow, 151; black-capped chickadee, 3; Carolina chickadee, 2; tufted titmouse, 29; white-breasted nuthatch, 14; red-breasted nuthatch, 2; brown creeper, 3; winter wren, 5; Carolina wren, 4; robin, 1; eastern bluebird, 12; golden-crowned kinglet, 7; starling, 636; myrtle warbler, 4; English sparrow, 221; red-wing, 50; cardinal, 44; Am. goldfinch, 79; eastern towhee, 5; Savannah sparrow, 1; slate-colored junco, 147; tree sparrow, 153; field sparrow, 8; white-throated sparrow, 81; fox sparrow, 2; swamp sparrow, 1; song sparrow, 39. **Total,** 55 species; 3985 individuals.—Charles E. Price, Jr., Gerhard Gassdorf, Victor A. Debes, Anna Debes, R. P. Kroon, John A. Gillespie, Mabel Gillespie, Paul Schwalbe, Quintin Kramer, James A. Fowler, Nelson D. Hoy, Phillips B. Street, Edward H. Rigby, E. H. Rigby, 3rd.

94. Hollsopple (Somerset Co.), Pa. (area adjoining and extending along the northwestern shore of the Quemahoning Reservoir; dense pine woodland 40%; open water 35%, low, brushy thickets 10%, second growth bordering streams and freshets 10%, roadside 5%).—Dec. 30; 8:30 a.m. to 3:30 p.m. Snowing intermittently; wind NW, 8-12 m.p.h.; ground covered with 1-2-in. snow; entire reservoir frozen over except small areas around feeding streams. Seven observers together. Total hours, 7 (on foot); total miles, 4 (on foot). Mallard, 30; black duck, 60; wood duck, 2 (seen in flight with good binoculars—M.J.); ruffed grouse, 2; hairy woodpecker, 1; downy woodpecker, 2; Am. crow, 185; black-capped chickadee, 10; golden-crowned kinglet, 2; English sparrow, 8; cardinal, 4; slate-colored junco, 61; tree sparrow, 62; song sparrow, 1. **Total,** 14 species; 430 individuals. (The ducks, unusual for this area, were likely due to the very mild fall and winter weather.)—Merle Jacobs, Don Jacobs, Jack Armstrong, Norma Cable, June Biesel, Leonard Shetler, Stanwyn G. Shetler (Johnstown Mennonite School Jr. Ornithologists Assn.).

95. Lancaster, Pa. (suburbs and parks about city and surrounding country, north along river to Columbia, south along river to Pequea; suburbs 5%, ponds and swamps 5%, farms and meadows 15%, open woodland along creek and river shore 75%).—Dec. 26; 7 a.m. to 4:30 p.m. Clear; temp. 0° to 30° to 15°; wind W to NW, 18-24 m.p.h.; 4-in. snow on ground; ponds and much of the river frozen. Thirteen observers in 7 parties. Total hours, 43¾; total miles, 185 (146 by car, 39 on foot). Mallard, 3; black duck, 852; Am. mer-

ganser, 27; turkey vulture, 3; sharp-shinned hawk, 1; red-tailed hawk, 13; red-shouldered hawk, 6; bald eagle, 1; marsh hawk, 3; peregrine falcon, 1; sparrow hawk, 11; ring-necked pheasant, 105; herring gull, 2; mourning dove, 6; barn owl, 1; belted kingfisher, 3; yellow-shafted flicker, 8; hairy woodpecker, 5; downy woodpecker, 43; horned lark, 48; blue jay, 4; Am. crow, 3985; black-capped chickadee, 48; tufted titmouse, 35; white-breasted nuthatch, 9; brown creeper, 14; winter wren, 10; Carolina wren, 6; mockingbird, 1; robin, 1; eastern bluebird, 12; golden-crowned kinglet, 2; loggerhead shrike, 1 (bill all black, white below, no barring); starling, 786; English sparrow, 179; red-wing, 4; cardinal, 80; purple finch, 10; Am. goldfinch, 23; eastern towhee, 1; grasshopper sparrow, 1 (studied under ideal conditions for ½ hr.; distinctive shape, coloration, and mouse-like habits especially noted—S.D.); slate-colored junco, 519; tree sparrow, 228; field sparrow, 15 (H.R.W., M.L.); white-throated sparrow, 277; song sparrow, 56. **Total,** 46 species; 7449 individuals. (Seen in area for some time up to Dec. 24; whistling swan, 5; Canada goose, 25; baldpates and pintails.)—H. C. Brown, Jr., Theodore and Carl Hake, Sam Dyke, Mary Grebinger, Carl Fasnacht, Elbert Nixdorf, Russell Markert, Charles and Louise Tanger, Ruth Sener, Montgomery Lampe, H. R. Woerner (Lancaster County Bird Club).

96. Linesville, Pa. (7½-mile radius from point 2 miles southeast of Linesville center, including part of Ohio shore of Pymatuning Reservoir, and Conneaut Lake; lake shore 40%, swamp 10%, open fields 25%, towns 5%, mixed woods 20%).—Dec. 30; 9 a.m. to 5 p.m. Cloudy, light snow squalls; temp. 22° to 28°; wind NW, 15-20 m.p.h.; ground nearly bare; lakes partly frozen. Four observers together. Total hours, 8 (2 in car, 6 on foot); total miles 58, (5 on foot, 53 by car). Canada goose, 350 (est.); mallard, 112; black duck, 73; Am. merganser, 21 bald eagle, 3 (2 ad. and 1 imm., sitting on the ice at edge of open water); marsh hawk, 1; sparrow hawk, 1; herring gull, 2; robin, 1; downy woodpecker, 5; blue jay, 1; black-capped chickadee, 28; white-breasted nuthatch, 2; starling, 68; English sparrow, 150; cardinal, 11; purple finch, 2; slate-colored junco, 19; tree sparrow, 101; song sparrow, 2. **Total,** 20 species; about 953 individuals. (Flock of 7 robins seen near Meadville on Jan. 8, feeding on wild grapes.)—Mr. and Mrs. Chester H. Pees, Sara Flaugh, Harry Sugg (Meadville Bird and Tree Club).

97. Lititz, Pa. (center of Lititz in northern Lancaster County to 7 miles north, Hammer Creek valley area and White Oak pond; town suburbs 10%, deciduous farm woodlots 30%, pastures 60%).—Dec. 26; 8 a.m. to 3:30 p.m. Clear; temp. 2° at start, 22° at return; wind NW, 25-38 m.p.h.; ground covered with 3-4-in. snow; ponds and creeks frozen. Seven observers in 2 parties. Total miles, 40 (25 on foot, 15 by car). Turkey vulture, 63; sharp-shinned hawk, 2; Cooper's hawk, 2; red-tailed hawk, 7; red-shouldered hawk, 1; rough-legged hawk, 2; ruffed grouse, 2; ring-necked pheasant, 280; mourning dove, 31; barn owl, 1; screech owl, 1; short-eared owl, 2; yellow-shafted flicker, 5; hairy woodpecker, 1; downy woodpecker, 10; horned lark, 42 (northern, 32; prairie, 10); blue jay, 3; Am. crow, 496; black-capped chickadee, 4; tufted titmouse, 26; white-breasted nuthatch, 26; brown creeper, 2; winter wren, 1; Carolina wren, 1; eastern bluebird, 2; golden-crowned kinglet, 2; starling, 435; myrtle warbler, 3; eastern meadowlark, 55; English sparrow, 345; cardinal, 37; Am. goldfinch, 111; eastern towhee, 1; slate-colored junco, 280; tree sparrow, 350; white-throated sparrow, 30; song sparrow, 72. **Total,** 37 species; about 2734 individuals.—Barton L. Sharp, Robert Buch, Donald Weir, Charles Bowman, Ford Gochenaur, Lamar Sipe, Paul Seaber (Lititz Bird Club).

98. Philadelphia, Pa. (Pennypack Creek valley, Delaware River to Lorimer Park; river edge 10%, public parks 30%, suburban area and farmland 30%, deciduous woodland 30%).—Jan. 1; 7:30 a.m. to 2:30 p.m. Snow flurries throughout; temp. 28° to 34°; wind W, 10-15 m.p.h., gusts to 20. Eleven observers together. Total hours, 77; total miles, 60 (50 on foot, 10 by car). Double-crested cormorant, 1; mallard 48 (not all feral); black duck, 150; pintail, 10; Am. merganser, 30; Cooper's hawk, 1; red-tailed hawk, 1; bald eagle, 1; sparrow hawk, 6; herring gull, 65; ring-billed gull, 1; mourning dove, 1; barred owl, 1; belted kingfisher, 1; yellow-shafted flicker, 1; hairy woodpecker, 3; downy woodpecker, 18; blue jay, 6; Am. crow, 120; black-capped chickadee, 2; tufted titmouse, 53; white-breasted nuthatch, 18; brown creeper, 2; winter wren, 2; Carolina wren, 1; eastern bluebird, 4; golden-crowned kinglet, 1; starling, 150+; English sparrow, 45; blackbird (sp.), 1; cardinal, 21; Am. goldfinch, 62; eastern towhee, 2; slate-colored junco, 110; tree sparrow, 120; white-throated sparrow, 57; fox sparrow, 2; song sparrow, 13. **Total,** 38 species; 1151 individuals.—Hilda Weber, Eleanor Phillips, William Yoder, William Nixon, George Bates, Joseph Ettlinger, George Lakata, Louis Reichel, Edward Morrow, George Babb, John T. McNeill, Jr. (Pennypack Valley Bird Club).

[A count from the Philadelphia Region covering a 15-mile diameter and engulfing the above count was submitted by the Delaware Valley Ornithological Club, who have graciously offered to have preference given to the Pennypack Valley list. The following additional species were listed by the 13 D.V.O.C. observers, who worked in 8 parties, and covered 54 miles on foot and 79 by car: baldpate,

16; green-winged teal, 6; scaup duck (sp.), 10; buffle-head, 9; red-shouldered hawk, 6; marsh hawk, 3; bob-white, 8; ring-necked pheasant, 9; killdeer, 1; long-eared owl, 2; horned lark, 2; Carolina chickadee, 5; red-breasted nuthatch, 1; mockingbird, 1; robin, 2; hermit thrush, 2; ruby-crowned kinglet, 1; Am. pipit, 2; cedar waxwing, 2; orange-crowned warbler, 1; myrtle warbler, 1; red-wing, 1; rusty blackbird, 2; pine siskin, 10; Savannah sparrow, 2; field sparrow, 16. **Total,** 58 species; 1569 individuals.—Ed.]

99. Pittsburgh, Pa. (city suburbs, Frick Park, Riverview Park, Schenley Park, Castle Shannon, Ben Avon, Forest Hills, Fox Chapel; deciduous wooded hillsides 40%, uncultivated fields 40%, lawns 20%).—Dec. 26 [hours not stated—Ed.]. Clear; temp. 12° to 23°; wind NW., 0-5 m.p.h.; ground covered 1/4-in. snow. Thirty-two observers in 13 parties. Total hours, 38 (on foot); total miles, 29 (on foot). Cooper's hawk, 2; ring-necked pheasant, 34; screech owl, 1; hairy woodpecker, 12; downy woodpecker, 34; blue jay, 4; Am. crow, 7; black-capped chickadee, 73; tufted titmouse, 86; white-breasted nuthatch, 35; brown creeper, 6; winter wren, 2; Carolina wren, 3; robin, 1; golden-crowned kinglet, 1; starling, 221; English sparrow, 424, cardinal, 99; Am. goldfinch, 3; slate-colored junco, 102; tree sparrow, 51; white-throated sparrow, 1; song sparrow, 43. **Total,** 23 species; about 1245 individuals.—Mr. and Mrs. Alex Hardie, Bessie Hardie, Eliz. McClelland, Janette Dickson, Alan Kirk, John Mehner, W. L. Black, Mrs. J. Bruce Paterson, Helen Reitz, Helen Blair, Mrs. Graham Netting, Anthony Netting, Mrs. Marie Oberholtz, Comly B. Shoemaker, and friends [names of 17 other observers not given—Ed.] (Audubon Society of Western Pennsylvania).

100. Reading, Pa. (circle with center 2 miles NE of city; deciduous woodland 40%, open farmland 40%, lakes and ponds 10%, streams and river bottoms 10%).—Dec. 26; 8 a.m. to 4 p.m. Clear; temp. 12° at start, 21° at finish; wind NW, 12-14 m.p.h.; 2-in. snow on ground; lakes and ponds frozen. Twenty-one observers in 4 parties. Total hours, 32; total miles, 95 (65 by car, 30 by foot). Mallard, 272; black duck, 319; gadwall, 1; baldpate, 80; pintail, 55; green-winged teal, 26; shoveller, 1; Am. merganser, 11; Cooper's hawk, 2; red-tailed hawk, 4; rough-legged hawk, 2; marsh hawk, 1; sparrow hawk, 4; ring-necked pheasant, 23; Am. coot, 1; killdeer, 2; belted kingfisher, 3; yellow-shafted flicker, 5; yellow-bellied sapsucker, 2; hairy woodpecker, 2; downy woodpecker, 22; blue jay, 12; Am. crow, 513; fish crow, 1; black-capped chickadee, 18; tufted titmouse, 18; white-breasted nuthatch, 15; red-breasted nuthatch, 5; brown creeper, 10; winter wren, 5; Carolina wren, 1; robin, 6; eastern bluebird, 10; golden-crowned kinglet, 53; ruby-crowned kinglet, 6; starling, 148; myrtle warbler, 6; English sparrow, 139; eastern meadowlark, 6; cardinal, 46; purple finch, 3; Am. goldfinch, 47; eastern towhee, 4; slate-colored junco, 449; tree sparrow, 151; field sparrow, 6; white-throated sparrow, 82; swamp sparrow, 1; song sparrow, 28. **Total,** 49 species; 2625 individuals.—Stanley Bright, Donald Burger, Robert E. Cook, Bob Corrigan, Richard Diener, J. Stuart Dreibelbis, Samuel C. Gundy, John W. Hand, Thomas Hanson, Paul Jensen, Warren Kalbach, Elwood Manning, Paul R. Martin, Earl L. Poole, Charles Schaich, Arthur Sigman, William E. Walter, J. B. Warriner, J. S. Warriner, Ira Weigley, Ralph Yerger (members and friends, Baird Ornithological Club).

101. Richboro (Bucks Co.), Pa. (from Holland, up Ironworks Creek, around Ironworks Creek Reservoir, and up both sides of creek to old grist mill; Worthington Mill Road to wooden bridge, Twining Road and Sackett's Ford Road near Rushland, valley of Little Neshaminy Creek, and Walton Road near Brenoble; open farmland 35%, deciduous woodland 30%, brush-grown fields 30%, cattail marsh 5%).—Dec. 26, 8 a.m. to 4:30 p.m. Clear; temp. 10° to 16°; wind NW, 15 m.p.h; ground covered with 4-8-in. snow, a week old; reservoir 95% frozen, creeks 35% frozen. Five observers in morning, 6 observers in 2 parties in afternoon. Total hours, 12 (on foot); total miles, 15 (on foot). Mallard, 78; black duck, 3; Cooper's hawk, 1; red-tailed hawk, 6; red-shouldered hawk, 1; marsh hawk, 2; sparrow hawk, 2; ring-necked pheasant, 5; mourning dove, 1; belted kingfisher, 3; hairy woodpecker, 3; downy woodpecker, 20; blue jay, 3; Am. crow, 167; tufted titmouse, 39; white-breasted nuthatch, 4; brown creeper, 1; robin, 1; ruby-crowned kinglet, 2; starling, 10; English sparrow, 20; eastern meadowlark, 12; cardinal, 6; Am. goldfinch, 4; slate-colored junco, 69; tree sparrow, 105; white-throated sparrow, 9; song sparrow, 53. **Total,** 28 species; 633 individuals. (Seen in area Dec. 29, eastern towhee, 1; Jan. 1, Am. merganser, 8; herring gull, 2; eastern bluebird, 3; field sparrow, 1; Jan. 2, ruddy duck, 1; screech owl, 1.)—Pauline Buckingham, L. Thomas, R. Thomas, E. Traub, D. Jarden, A. Herzog, C. Burk, L. McConnell (Neshaminy Valley Nature Club).

102. Scranton, Pa. (from city to point 12 miles northeast; Susquehanna River Valley to Falls, Pa.; open farmland 50%, suburbs 30%, deciduous and evergreen woodlots 20%).—Jan. 2; 8:30 a.m. to dusk. Cloudy; light snowfall during a.m.; temp. 30° to 32°; wind variable, 1-7 m.p.h.; ground covered with 4-6-in. snow. Observers together. Total hours, 8½; total miles, 40 (5 on foot, 35 in car). Black duck, 76; hooded merganser, 2; Am. mer

ganser, 9; sparrow hawk, 1; ruffed grouse, 1; robin, 1; yellow-shafted flicker, 1; downy woodpecker, 4; blue jay, 2; Am. crow, 142; black-capped chickadee, 19; white-breasted nuthatch, 3; starling, 34; Am. goldfinch, 9; English sparrow, 31; cardinal, 9; slate-colored junco, 53; tree sparrow, 73; song sparrow, 5. **Total,** 19 species; 475 individuals.—David Wharton, Eugene Marmo, Ed. Williams (Scranton Bird Club).

103. State College, Pa. (college campus, town, and feeding stations; college farms, orchards, and woodlots; stream with cattail marshes east of town; Spring Creek from Houserville to Rock; town and campus 34%, farmland 22%, orchards 4%, mixed deciduous and coniferous woodlots 12%, streams and cattail marshes 28%).—Jan. 1; 8 a.m. to 5 p.m. Light snow, blowing hard, in a.m., heavier snow in p.m.; temp. 28° to 32°; wind W, 39-54 m.p.h. in a.m., 19-24 m.p.h. in p.m.; ground covered with 1-2-in. fresh snow; streams open. Six observers in 3 parties. Total hours, 21 (20 on foot, 1 by car); total miles, 29 (14 on foot, 15 by car). Mallard, 1; black duck, 1; sparrow hawk, 1; Wilson's snipe, 1; pileated woodpecker, 2; downy woodpecker, 7; horned lark, 18; blue jay, 11; Am. crow, 7; black-capped chickadee, 17; tufted titmouse, 13; white-breasted nuthatch, 18; starling, 54; English sparrow, 166; cardinal, 24; slate-colored junco, 106; tree sparrow, 145; song sparrow, 4. **Total,** 18 species; 596 individuals. (Seen in area Jan. 2: red-headed woodpecker, 2; robin, 2; purple finch, 5.)—Mrs. Arthur Cowell, David Cowell, Haskell B. Curry, Ward M. Sharp, Wayne H. Wilson, William S. Clarke, Jr.

104. Warren, Pa. (center of town to point 6 miles north, along Conewango Creek, to Dougherty Run and Rhine Run area; Allegheny River region 3-4 miles west of town; mature deciduous woodland 40%, open farmland and upland fields 30%, town suburbs 10%, river and creek bottomlands 20%).—Jan. 1; 9:30 a.m. to 5:15 p.m. Overcast, with continuous snow flurries; temp. 26° to 28° to 26°; wind NE, 12-18 m.p.h.; ground covered with 18-24-in. snow; all streams open. Two observers together. Total hours, 7½ (on foot); total miles, 12 (on foot). Am. merganser, 1; herring gull, 1; hairy woodpecker, 1; downy woodpecker, 1; blue jay, 1; black-capped chickadee, 20; white-breasted nuthatch, 8; starling, 43; English sparrow, 11; cardinal, 4; slate-colored junco, 14; tree sparrow, 70; song sparrow, 5. **Total,** 13 species; 180 individuals.—Harris E. Johnson, Thomas M. Hampson.

105. West Chester, Pa. (7½-mile radius; open farmland 55%, overgrown fields 20%, deciduous woods 20%, mixed evergreen plantings 2%, serpentine barrens 1%, town suburbs 2%).—Dec. 27; 7 a.m. to 5:30 p.m. Clear, but with slight haziness in p.m.; temp. 8° to 37° to 27°; wind W, 1 m.p.h. in a.m., 1-5 m.p.h. in p.m.; ground covered with 4-in. solidly packed snow; all ponds and larger streams frozen except in rapidly moving water. Thirty-six observers in 17 parties. Total hours, 94¼ (73½ on foot, 20¾ by car); total miles, 308¼ (66¼ on foot, 242 by car). Great blue heron, 2; Canada goose, 17; mallard, 48; black duck, 47; wood duck, 2 (F.N.); ruddy duck, 1 (W.H.); Am. merganser, 30; turkey vulture, 12; Cooper's hawk, 3; red-tailed hawk, 10; red-shouldered hawk, 4; marsh hawk, 2; sparrow hawk, 14; ring-necked pheasant, 3; killdeer, 1; mourning dove, 33; barn owl, 1; horned owl, 1 (P.S.M.); belted kingfisher, 4; yellow-shafted flicker, 15; red-bellied woodpecker, 4; hairy woodpecker, 22; downy woodpecker, 95; eastern phoebe, 2 (F.N., 1; M.S.G., *et al.*, 1); horned lark, 1; blue jay, 64; Am. crow, 2883; black-capped chickadee, 54; Carolina chickadee, 18; tufted titmouse, 112; white-breasted nuthatch, 58; red-breasted nuthatch, 1; brown creeper, 17; winter wren, 6; Carolina wren, 4; robin, 13; hermit thrush 1; eastern bluebird, 76; golden-crowned kinglet, 57; ruby-crowned kinglet, 7; starling, 450; myrtle warbler, 8; English sparrow, 353; eastern meadowlark, 11; red-wing, 3; rusty blackbird, 2; purple grackle, 1; cardinal, 108; purple finch, 6; pine siskin, 19; Am. goldfinch, 356; eastern towhee, 1 (V.L.F.); slate-colored junco, 1271; tree sparrow, 974; field sparrow, 3; white-throated sparrow, 330; fox sparrow, 4 (R.L.L., *et al.*); swamp sparrow, 3; song sparrow, 218. **Total,** 59 species; 7866 individuals. (Individual lists smaller than usual but composite results excellent indicating thorough coverage.)—Mrs. Isaac G. Roberts, Alice W. Swayne, R. Louis Lloyd, Arthur Hoopes, Helen and Gertrude Rhoads, Pauline Ramstine, Mrs. Joseph Russell, Mrs. Laura W. Abbott, Mrs. Alfred Hallowell, Horace H. Way, Mr. and Mrs. Joseph Cope, Mr. and Mrs. Frederic Swan, Anna P. and Florence E. James, Caroline Z. Watts, Violet L. Findlay, Margaret S. Goodwin, Mary E. Thomas, Mrs. William Pendergrast, Mrs. Abner Few, Robert B., Robert L., and Virginia Gordon, Robert Ross, Mr. and Mrs. Shippen Willing, Thomas Morgan, William Heed, Francis and Richard Newman, Paul S. Martin, Joanna R. Bucknell, Albert E. Conway (West Chester Bird Club and friends).

106. Wyncote, Pa. (to Baederwood, Brier-Bush, Trevose, Chestnut Hill; deciduous woods 45%, brushy fields 30%, town suburbs 18%, open farmland 7%).—Dec. 26; 7 a.m. to 4 p.m. Clear; temp. 10° to 20°; wind NW, 20 m.p.h., diminishing by noon; ground covered with 6-in. snow; ponds frozen. Twenty-four observers, 14 afield in 4 groups, others at 10 sanctuaries and feeding sta-

tions. Total hours, 30 (24 afoot, 6 in car); total miles, 60 (25 afoot, 35 by car). Sharp-shinned hawk, 1; Cooper's hawk, 5; red-tailed hawk, 4; red-shouldered hawk, 4; sparrow hawk, 3; ring-necked pheasant, 13; mourning dove, 68; barn owl, 2; yellow-shafted flicker, 6; hairy woodpecker, 7; downy woodpecker, 83; blue jay, 47; Am. crow, 306+; black-capped chickadee, 7; tufted titmouse, 90; white-breasted nuthatch, 82; red-breasted nuthatch, 5; brown creeper, 4; winter wren, 2; robin, 1; hermit thrush, 2; eastern bluebird, 50; golden-crowned kinglet, 76; starling, 54+; myrtle warbler, 37; English sparrow, 473+; eastern meadowlark, 12; cardinal, 91; purple finch, 18; Am. goldfinch, 62; eastern towhee, 10; slate-colored junco, 924; tree sparrow, 155; field sparrow, 8; white-throated sparrow, 336; fox sparrow, 5; song sparrow, 69. **Total,** 37 species; 3425+ individuals.—J. Abramson, Mr. and Mrs. J. Bartsch, Mrs. W. Custer, Mr. and Mrs. J. Dornan, Mrs. W. Dievler, R. Ellis, Mr. and Mrs. F. Griscom, J. Hare, Miss Heacock, J. Holmes, R. Lord, Mr. and Mrs. A. Moore, F. Mears, Mrs. O. Nolde, Mrs. F. Ramsay, Mrs. F. Rossiter, J. Schnell, C. Sooy, Mrs. C. Sievert, Mrs. H. Wright (Wyncote Bird Club).

107. York, Pa. (approximately same area as in 5 previous years; fields and countryside from East York adjoining the Lincoln Highway East, and 1 mile north, to Wrightsville, north along the Susquehanna River, 11½ miles; south 2 miles; open farmland 50%, deciduous farm woodlots 10%, marshy meadow 5%, woodland and fields along river 35%).—Jan. 2; dawn to dusk. Clear; temp. 30° to 26°; wind NW, 25-38 m.p.h.; ground muddy; river open and at flood stage. Nine observers in 5 parties. Total hours, 19 (16½ on foot, 2½ in car); total miles, 42 (13 on foot, 29 by car). Mallard, 10; black duck, 292; Am. golden-eye, 36; Am. merganser, 3; red-breasted merganser, 4; Am. coot, 1; rough-legged hawk, 1; sparrow hawk, 4; ring-necked pheasant, 1; herring gull, 8; mourning dove, 4; downy woodpecker, 9; yellow-shafted flicker, 1; horned lark, 39; Am. crow, 489; black-capped chickadee, 10; tufted titmouse, 25; white-breasted nuthatch, 1; brown creeper, 7; Carolina wren, 8; ruby-crowned kinglet, 2; cedar waxwing, 2; starling, 424; English sparrow, 106; cardinal, 26; Am. goldfinch, 47; eastern towhee, 1; slate-colored junco, 64; tree sparrow, 19; white-throated sparrow, 18; fox sparrow, 1; song sparrow, 9. **Total,** 31 species; 1675 individuals.—M. Dorothy Schwartzer, Elaine G. Tompkins, Anna C. Reinecker, Winifred L. Moore, Verna M. Dietz, Mrs. J. T. Yoder, Ronald Billet, Ronald Eickelberger, Viola V. Dietz (York County Bird Club).

108. Bombay Hook National Wildlife Refuge (Kent Co.), Del. (15-mile circle, Woodland Beach to Pickering Beach along Delaware Bay; Moore Pond and Lake Como bordering on the west, with the refuge itself as a nucleus).—Dec. 26; 5 a.m. to 4:30 p.m. Partly cloudy; temp. 12° at start, 25° at return; wind NW, strong; fresh-water areas frozen, brackish streams partially frozen. Nineteen observers in 8 parties. Total hours, 67 (59 afoot, 8 by car); total miles, 122 (47 afoot, 75 by car). Pied-billed grebe, 5 (observed by 3 parties); great blue heron, 12; Am. egret, 1; black-crowned night heron, 4; Am. bittern, 1; Canada goose, 126; mallard, 38; black duck, 1523; gadwall, 21; baldpate, 2; pintail, 9; green-winged teal, 20; shoveller, 1; wood duck, 1; ring-necked duck, 1; lesser scaup duck, 13; ruddy duck, 6; hooded merganser, 7; Am. merganser, 6; turkey vulture, 116; Cooper's hawk, 4; red-tailed hawk, 21; red-shouldered hawk, 1; rough-legged hawk, 7; bald eagle, 9; marsh hawk, 67; peregrine falcon, 1; pigeon hawk, 1 (R.S., W.R.); sparrow hawk, 33; bob-white, 31; ring-necked pheasant, 2; Am. coot, 69; killdeer, 4; Wilson's snipe, 1; greater yellow-legs, 4; great black-backed gull, 1; herring gull, 126; ring-billed gull, 11; mourning dove, 55; barn owl, 1; horned owl, 5; short-eared owl, 1, yellow-shafted flicker, 25; red-bellied woodpecker, 17; hairy woodpecker, 5; downy woodpecker, 27; eastern phoebe, 2; horned lark, 160 (northern, 117; prairie, 43); blue jay, 19; Am. crow, 2130; fish crow, 3; Carolina chickadee, 97; tufted titmouse, 41; white-breasted nuthatch, 1; red-breasted nuthatch, 2; brown creeper, 5; winter wren, 1; Carolina wren, 8; mockingbird, 8; robin, 1; hermit thrush, 4; golden-crowned kinglet, 25; Am. pipit, 103; loggerhead shrike, 2; starling, 1546; myrtle warbler, 94; English sparrow, 175; eastern meadowlark, 181; red-wing, 4575; rusty blackbird, 11; purple grackle, 330; brown-headed cowbird, 77; cardinal, 41; pine siskin, 2; Am. goldfinch, 130; eastern towhee, 3; Savannah sparrow, 1; slate-colored junco, 172; tree sparrow, 319; field sparrow, 21; white-throated sparrow, 169; fox sparrow, 6; swamp sparrow, 9; song sparrow, 58. **Total,** 84 species (1 additional subspecies); about 12,983 individuals.—Jack Arnett, Trusten Baldwin, Henry Bush, Herbert S. Cutler, Edwin F. Finkel, James Fowler, Otto Gardner, Harry Goldstein, Quintin Kramer, Evelyn Kramer, Russel Neiger, Donald Ottenberg, Charles Price, William Reynolds, Robert Sehl, Lewis Sterner, Donald Stone, Morris Weiss, Albert Zaid (Delaware Valley Ornithological Club and guests).

109. Middletown, Del. (north side of town to Noxontown Pond, Taylor's Bridge and Delaware River; thence along shore to Port Penn and Delaware City, and back to Middletown; open farmland 45%, tidewater and river marshes 35%, deciduous woodlands 20%).—Dec. 31; dawn to dark. Cloudy; temp. 30° to 32°; wind NW, 15-35 m.p.h.; ground bare; ponds open. Four observers, mostly

together. Total hours, 10 (8 on foot, 2 in car); total miles, 8½ (on foot). Great blue heron, 4, Canada goose, 34; mallard, 47; black duck, 206; shoveller, 1; canvas-back, 8; scaup duck (sp.), 2; Am. golden-eye, 3; buffle-head, 1; ruddy duck, 14; Am. merganser, 120; turkey vulture, 13; black vulture, 3; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 1; bald eagle, 1; marsh hawk, 7; sparrow hawk, 6; Am. coot, 1; Wilson's snipe, 1; herring gull, 19; ring-billed gull, 71; mourning dove, 1; barred owl, 1; belted kingfisher, 1; red-bellied woodpecker, 3; hairy woodpecker, 1; downy woodpecker, 4; Am. crow, 12; Carolina chickadee, 5; tufted titmouse, 3; red-breasted nuthatch, 1; brown creeper, 1; winter wren, 2; mockingbird, 4; robin, 1; golden-crowned kinglet, 2; Am. pipit, 2; starling, 450 (est.); English sparrow, 13; eastern meadowlark, 27; red-wing, 185 (est.); purple grackle, 20; brown-headed cowbird, 190 (est.); cardinal, 7; Am. goldfinch, 3; Savannah sparrow, 1; slate-colored junco, 32; tree sparrow, 5; field sparrow, 1; white-crowned sparrow, 1 (at banding station); white-throated sparrow, 13; song sparrow, 5. **Total,** 54 species; about 1567 individuals.—Ethel Brady, Theodore Jewell, Stuyvesant Pell, Walden Pell 2nd.

110. Accokeek, Md. (east side of Potomac just below mouth of Piscataway Creek; area of about 2 square miles comprising river front, cultivated river flat, wooded creek bottom, wooded swamp, cattail marsh, border of adjacent wooded upland, and upland farm; covered intensively on foot).—Dec. 29; 8:15 a.m. to 4:15 p.m. Heavy clouds, drizzling in first hour and last 2 hours, low fog over water areas in a.m.; temp. 39° at start, 47° at 12:30, 56° at end; wind SSW, gusty after 2 p.m., up to 25 m.p.h.; ground bare, grass and brush beaded with rain drops until dispelled by wind; water open, but some residual ice in sheltered coves. Four observers singly or in pairs. Total hours, 21; total miles, 17. Mallard, 4; black duck, 100; canvas-back, 3; old-squaw, 1; Am. merganser, 160; turkey vulture, 6; black vulture, 10; red-tailed hawk, 3; red-shouldered hawk, 1; bald eagle, 5; marsh hawk, 2; sparrow hawk, 1; bob-white, 9; killdeer, 6; herring gull, 5; ring-billed gull, 25; mourning dove, 75; barred owl, 1; belted kingfisher, 3; yellow-shafted flicker, 20; pileated woodpecker, 1; red-bellied woodpecker, 13; hairy woodpecker, 6; downy woodpecker, 30; blue jay, 20; Am. crow, 20; Carolina chickadee, 40; tufted titmouse, 60; white-breasted nuthatch, 4; brown creeper, 9; winter wren, 4; Carolina wren, 25; mockingbird, 4; hermit thrush, 1; eastern bluebird, 14; golden-crowned kinglet, 7; ruby-crowned kinglet, 1; Am. pipit, 3; starling, 75; myrtle warbler, 2; English sparrow, 75; eastern meadowlark, 120; red-wing, 10; cardinal, 75; Am. goldfinch, 90; eastern towhee, 2; Savannah sparrow, 7; slate-colored junco, 200; tree sparrow, 14; field sparrow, 30; white-throated sparrow, 170; song sparrow, 50. **Total,** 52 species; about 1662 individuals.—A. A. Baker, Edwin T. McKnight, Thomas B. Nolan, W. W. Rubey.

111. Chase (Baltimore Co.), Md. (west shore of Chesapeake Bay from Middle River to north shore of Gunpowder River, inland to B. & O. Railroad; tidal creeks and adjacent marshes 50%, lowland woods 20%, fields 15%, upland woods 10%, dooryards and roadside 5%).—Dec. 26; 7:30 a.m. to 4 p.m. Clear; temp. 15° to 25°; wind NW, 13-18 m.p.h.; ground mostly covered with 2-in. old snow; smaller tidal creeks entirely ice-covered, ice extending about 300 yds. from shores of larger estuaries. Twenty observers in 4 parties. Total hours, 21 (on foot); total miles, 20 (on foot); cars extensively used for access to observation points. Pied-billed grebe, 1; whistling swan, 401 (75 est., 326); Canada goose, 50; black duck, 598 (500 est., 98); baldpate, 7000 (est.); redhead, 200 (est.); ring-necked duck, 2; canvas-back, 10; (lesser?) scaup duck, 4; unidentified waterfowl, at least 20,000 (probably mostly redheads, canvas-back, and scaup); Am. golden-eye, 5; buffle-head, 14; ruddy duck, 527 (400 est., 127); Am. merganser, 4; turkey vulture, 7; red-tailed hawk, 4; rough-legged hawk, 1 (H.K., H.S.); bald eagle, 14 (est. after generous allowance for duplication); marsh hawk, 6; sparrow hawk, 2; Am. coot, 500 (est.); herring gull, 123; ring-billed gull, 20; barred owl, 1; yellow-shafted flicker, 6; red-bellied woodpecker, 5; hairy woodpecker, 2; downy woodpecker, 25; blue jay, 17; Am. crow, 57; Carolina chickadee, 12; tufted titmouse, 17; white-breasted nuthatch, 8; brown creeper, 6; Carolina wren, 3; mockingbird, 6; catbird, 1 (I.E.H.); brown thrasher, 1 (H.F.K.); robin, 18; hermit thrush, 1; golden-crowned kinglet, 6; ruby-crowned kinglet, 6; starling, 37; myrtle warbler, 12; English sparrow, 17; eastern meadowlark, 1; red-wing, 29; cardinal, 32; Am. goldfinch, 38; eastern towhee, 21; slate-colored junco, 93; tree sparrow, 76; field sparrow, 14; white-throated sparrow, 38; swamp sparrow, 2; song sparrow, 6. **Total,** 55 species; about 30,107 individuals.—Gorman Bond, Mr. and Mrs. T. C. Buck, Jane Buck, Lois Buck, Donald Courts, Orville W. Crowder, Herbert Gross, Irving E. Hampe, Haven Kolb, Mr. and Mrs. Herman F. Kuch, A. O. Ramsey, Bert Ramsey, C. E. Roberts, Henri Seibert, Richard Simon, Stephen Simon, Frank Sommer, Woody Spitler (Maryland Ornithological Society).

112. Kent Island, Md. (7½-mile radius centered off Tilghman Pt. in Eastern Bay, and including Kent Island north to Matapeake and Stevensville, Kent Narrows, Grasonville, Wye Island, Tunis

Mills, St. Michaels, and Wittman; bays and estuaries 50%, fields 30%, pine and deciduous woods 12%, brackish marsh 8%).—Dec. 31; 6:45 a.m. to 5 p.m. Overcast; temp, 34° to 36°; wind NW, 25-30 m.p.h.; ground bare; all water open. Seven observers in 3 parties. Total hours, 29 (18½ on foot, 10 by car, ½ on ferry); total miles, 202 (11 on foot, 186 by car, 5 by ferry). Common loon, 1; horned grebe, 199; great blue heron, 18; whistling swan, 3005; Canada goose, 1660; mallard, 52; black duck, 830; baldpate, 2415; pintail, 38; redhead, 535; ring-necked duck, 154; canvas-back, 2770; scaup duck (only greater scaup was definitely identified), 148; Am. golden-eye, 196; buffle-head, 41; old-squaw, 131; white-winged scoter, 9; Am. scoter, 1; ruddy duck, 2; hooded merganser, 10; Am. merganser, 61; red-breasted merganser, 13; turkey vulture, 248; black vulture, 1; Cooper's hawk, 4; red-tailed hawk, 9; red-shouldered hawk, 2; rough-legged hawk, 1; bald eagle, 1; marsh hawk, 23; sparrow hawk, 19; bob-white, 11; Am. coot, 1700; killdeer, 1; great black-backed gull, 2; herring gull, 310; ring-billed gull, 375; laughing gull, 1 (T.W.D., W.M.D., F.R.B.); Bonaparte's gull, 8; belted kingfisher, 4; yellow-shafted flicker, 4; red-bellied woodpecker, 5; hairy woodpecker, 2; downy woodpecker, 9; horned lark, 3; blue jay, 3; Am. crow, 1190; fish crow, 2; Carolina chickadee, 25; tufted titmouse, 8; white-breasted nuthatch, 1; brown creeper, 1; mockingbird, 3; eastern bluebird, 11; golden-crowned kinglet, 5; Am. pipit, 235; loggerhead shrike (migrant), 1; starling, 1080; myrtle warbler, 3; English sparrow, 57; eastern meadowlark, 74; red-wing, 3470; purple grackle, 1; brown-headed cowbird, 50; cardinal, 37; Am. goldfinch, 29; eastern towhee, 1; Savannah sparrow, 19; slate-colored junco, 146; tree sparrow, 13; field sparrow, 67; white-throated sparrow, 52; fox sparrow, 1; swamp sparrow, 1; song sparrow, 23. **Total,** 75 species; about 21,641 individuals. (Seen in area on Dec. 22 by E. G. Baldwin, T. W. Donnelly, and N. Shelton: green-winged teal, 2; Caspian tern, 1; yellow-bellied sapsucker, 2; red-breasted nuthatch, 3; Carolina wren, 1; short-billed marsh wren, 1; ruby-crowned kinglet, 1.)—Fern R. Bell, M. Catherine Crone, W. M. Davidson, Chandler S. Robbins, Roxie C. Simpson, John W. Taylor, John E. Willoughby.

113. Loch Raven (Baltimore Co.), Md. (from Towson around the lake, through Dulaney Valley to Loch Raven Station and back to Towson via Limekiln Bottom; early seral stages (30 years following cultivation) 80%, deciduous woodland 10%, cultivated land 5%, coniferous plantations about 30 years old 5%).—Dec. 28; 6:30 a.m. to 4:45 p.m. Clear; temp. 24° to 44°; wind S, less than 1 m.p.h.; ground covered with 2-in. old snow; all smaller inlets of lake ice-covered. Observers together except for 2 short periods. Total hours, 12 (11 on foot, 1 in car); total miles, 35 (15 on foot, 20 in car). Common loon, 1; mallard, 2; black duck, 16; buffle-head, 1; hooded merganser, 1; Am. merganser, 76; turkey vulture, 11; red-tailed hawk, 1; sparrow hawk, 2; belted kingfisher, 1; yellow-shafted flicker, 3; downy woodpecker, 12; blue jay, 2; Am. crow, 8; Carolina chickadee, 21; tufted titmouse, 5; Carolina wren, 1; eastern bluebird, 4; myrtle warbler, 12; English sparrow, 6; cardinal, 11; Am. goldfinch, 22; slate-colored junco, 68; white-throated sparrow, 50; swamp sparrow, 5; song sparrow, 17. **Total,** 26 species; 359 individuals. (A falling barometer may have occasioned the low level of avian activity observed.)—David Kolb, Haven Kolb.

114. McCoole (Allegany Co.), Md. (center of town to 1 mile east; center of town north along U.S. 220 to Dawson).—Dec. 28; 9 a.m. to 4 p.m. Partly cloudy; temp. 15° to 45°; wind W, 20 m.p.h.; patches of snow on ground. Total hours, 7; total miles, 9 (3 on foot, 6 by car). Sparrow hawk, 1; hairy woodpecker, 1; downy woodpecker, 4; blue jay, 2; Am. crow, 3; black-capped chickadee, 6; tufted titmouse, 2; brown creeper, 1; mockingbird, 2; robin, 2; starling, 6; myrtle warbler, 2; English sparrow, 65; cardinal, 8; Am. goldfinch, 3; slate-colored junco, 18; tree sparrow, 8; white-crowned sparrow, 16 (¼ adults; about 35 wintered last year, all immature; not recorded in previous winters); white-throated sparrow, 3; song sparrow, 7. **Total,** 20 species; 160 individuals.—Leonard M. Llewellyn.

115. Ocean City, Md. (7½-mile circle from Berlin, including Ocean City inlet, northern 6 miles of Assateague Is., South Point, Newark, Pocomoke River from Powellsville to Whaleysville, and the St. Martin River; tidal bays and estuaries 25%, upland loblolly pine and deciduous woods 20%, fields 16%, salt marshes 15%, Pocomoke swamp 13%, ocean beach 11%).—Dec. 27; 7 a.m. to 5:30 p.m. Clear; temp. 10° to 40°; wind SW, 5 m.p.h.; ground bare; marshes, tidal creeks and Newport Bay frozen, Sinepuxent Bay half frozen, Isle of Wight Bay open. Eleven observers in 5 parties. Total hours, 45½ (35 on foot, 10 by car, ½ by motorboat); total miles, 191 (33 on foot, 157 by car, 1 by boat). Common loon, 4; red-throated loon, 15; Holboell's grebe, 2; horned grebe, 25; pied-billed grebe, 5; double-crested cormorant, 1; great blue heron, 17; Canada goose, 2030; brant, 10,000 (±1000); snow goose, 1; blue goose, 1 ad. (S.H.L., E.A.); mallard, 22; black duck, 1280; baldpate, 11; pintail, 78; green-winged teal, 17; shoveller, 3; wood duck, 5; redhead, 12; canvas-back, 105; scaup duck (only greater scaup definitely identified), 540; Am. golden-eye, 387; buffle-head, 650; old-squaw, 270; eider (sp.), 1♀ (J.H.B.); white-winged scoter, 350; surf scoter,

1300 (est.); Am. scoter, 270; ruddy duck, 27; hooded merganser, 2; Am. merganser, 1; red-breasted merganser, 347; turkey vulture, 383; black vulture, 2; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 8; red-shouldered hawk, 3; rough-legged hawk, 1; bald eagle, 2; marsh hawk, 10; sparrow hawk, 15; bob-white, 30; Virginia rail, 1; Am. coot, 108; killdeer, 131; black-bellied plover, 32; ruddy turnstone, 1 (S.H.L., E.A.); woodcock, 1; Wilson's snipe, 1; greater yellow-legs, 1; purple sandpiper, 14; least sandpiper, 5; red-backed sandpiper, 305; western sandpiper, 10; sanderling, 366; great black-backed gull, 14; herring gull, 960; ring-billed gull, 174; Bonaparte's gull, 13; Forster's (?) tern, 2; mourning dove, 91; horned owl, 1; barred owl, 1; short-eared owl, 1; belted kingfisher, 5; yellow-shafted flicker, 53; pileated woodpecker, 17; red-bellied woodpecker, 36; yellow-bellied sapsucker, 4; hairy woodpecker, 21; downy woodpecker, 24; eastern phoebe, 1; horned lark, 270 (including 17 northern and 28 prairie); blue jay, 5; Am. crow, 261; Carolina chickadee, 91; tufted titmouse, 51; white-breasted nuthatch, 7; brown creeper, 4; house wren, 1 (well seen—T.W.D.); winter wren, 11; Carolina wren, 46; long-billed marsh wren, 1; short-billed marsh wren, 3; mockingbird, 5; catbird, 5; brown thrasher, 3; robin, 77; hermit thrush, 4; eastern bluebird, 82; golden-crowned kinglet, 33; ruby-crowned kinglet, 3; Am. pipit, 830; cedar waxwing, 7; loggerhead shrike, 1; starling, 448; myrtle warbler, 162; palm warbler (western), 3; English sparrow, 142; eastern meadowlark, 1028; red-wing, 790; purple grackle, 681; brown-headed cowbird, 517; cardinal, 59; purple finch, 1; pine siskin, 12; Am. goldfinch, 191; eastern towhee, 40; Ipswich sparrow, 1; Savannah sparrow, 64; sharp-tailed sparrow, 2; vesper sparrow, 13; slate-colored junco, 435; tree sparrow, 20; chipping sparrow, 1; field sparrow, 181; white-throated sparrow, 819; fox sparrow, 4; Lincoln's sparrow, 1 (studied at leisure at close range; observer familiar with this species and with similarity of swamp sparrow—J.E.W.); swamp sparrow, 98; song sparrow, 177; snow bunting, 125. **Total,** 123 species (1 additional subspecies); about 28,446 individuals.—Elting Arnold, John H. Buckalew, Thomas W. Donnelly, Ira N. Gabrielson, Seth H. Low, M. Brooke Meanley, Arnold L. Nelson, Chandler S. Robbins, Robert E. Stewart, John W. Taylor, John E. Willoughby.

116. Southern Anne Arundel County, Md. (7½-mile radius centered 1 mile north of West River P. O., and including the South and West Rivers, Shadeside Peninsula, and the Patuxent River from Governor's Bridge to Leon: Chesapeake Bay and estuaries 30%, bottomland forest 20%, fields 20%, upland deciduous woods 15%, pine woods 10%, brackish tidal marsh 5%).—Jan. 2; 7:30 a.m. to 5:20 p.m. Overcast; temp. 35° to 45°; wind W, 5-10 m.p.h.; ground bare; rivers and ponds open. One observer in a.m.; 2 together in p.m. Total hours, 10 (6½ on foot, 3½ by car); total miles, 111 (9 on foot, 102 by car). Red-throated loon, 1; horned grebe, 35; great blue heron, 2; black duck, 17; canvas-back, 4; scaup duck (sp.), 1100; Am. golden-eye, 75; buffle-head, 42; old-squaw, 23; white-winged scoter, 11; ruddy duck, 6880 (±150); Am. merganser, 1; red-breasted merganser, 6; turkey vulture, 124; black vulture, 6; red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 4; marsh hawk, 4; sparrow hawk, 7; Am. coot, 1200 (±100); red-breasted merganser, 6; herring gull, 185; ring-billed gull, 7; Bonaparte's gull, 7; yellow-shafted flicker, 2; red-bellied woodpecker, 3; downy woodpecker, 4; blue jay, 9; Am. crow, 68; Carolina chickadee, 13; tufted titmouse, 5; brown creeper, 11; Carolina wren, 10; mockingbird, 12; robin, 6; hermit thrush, 1; eastern bluebird, 3; golden-crowned kinglet, 14; ruby-crowned kinglet, 3; Am. pipit, 6; starling, 64; myrtle warbler, 2; English sparrow, 55; eastern meadowlark, 39; red-wing, 5; cardinal, 32; Am. goldfinch, 7; eastern towhee, 2; slate-colored junco, 65; tree sparrow, 15; field sparrow, 10; white-throated sparrow, 34; fox sparrow, 1; swamp sparrow, 2; song sparrow, 15. **Total,** 55 species; about 10,261 individuals.—Chandler S. Robbins, Robert E. Stewart.

117. Southern Dorchester County, Md. (Blackwater National Wildlife Refuge to Elliott Island; same area and habitats as last year).—Dec. 28; 6:30 a.m. to 5:30 p.m. Clear; temp. 16° to 52°; wind SW, 5 m.p.h.; ground bare; all water frozen except parts of Fishing Bay, and a boat channel in Duck Point Cove; very unusual condition for early winter. Seven observers in 4 parties. Total hours, 39 (27 on foot, 12 by car); total miles, 196 (19 on foot, 177 by car). Horned grebe, 7; pied-billed grebe, 1; great blue heron, 15; Am. egret, 1; black-crowned night heron, 1; Am. bittern, 1; whistling swan, 39; Canada goose, 2140; blue goose, 1 (S.H.L.); mallard, 225; black duck, 530; baldpate, 10; pintail, 3; canvas-back, 54; scaup duck (only greater scaup identified), 50; Am. golden-eye, 260; buffle-head, 90; old-squaw, 25; ruddy duck, 46; Am. merganser, 46; red-breasted merganser, 1; turkey vulture, 90; sharp-shinned hawk, 2; Cooper's hawk, 3; red-tailed hawk, 9; red-shouldered hawk, 9; rough-legged hawk, 1; bald eagle, 11; marsh hawk, 21; sparrow hawk, 6; bob-white, 1; Am. coot, 2; killdeer, 9; Wilson's snipe, 2; greater yellow-legs, 2; lesser yellow-legs, 5 (S.H.L., J.E.W., J.W.T.); herring gull, 84; ring-billed gull, 15; horned owl, 5; barred owl, 1; belted kingfisher, 4; yellow-shafted flicker, 5; pileated woodpecker, 8; red-bellied woodpecker, 4; hairy woodpecker, 4; downy woodpecker, 25; horned lark, 6; blue jay, 4; Am. crow, 655; Carolina

chickadee, 145; tufted titmouse, 90; red-breasted nuthatch, 3; brown-headed nuthatch, 57; brown creeper, 12; house wren, 1 (S.H.L.); winter wren, 5; Carolina wren, 16; long-billed marsh wren, 30; short-billed marsh wren, 2; mockingbird, 1; catbird, 1; robin, 24; hermit thrush, 4; eastern bluebird, 34; golden-crowned kinglet, 52; ruby-crowned kinglet, 12; Am. pipit, 30; cedar waxwing, 10; starling, 635; myrtle warbler, 1000 (±50); yellowthroat, 1; English sparrow, 51; eastern meadowlark, 142; red-wing, 1430; rusty blackbird, 1; purple grackle, 20; cardinal, 22; purple finch, 1; pine siskin, 100; Am. goldfinch, 62; eastern towhee, 3; Savannah sparrow, 7; vesper sparrow, 2; slate-colored junco, 49; tree sparrow, 10; field sparrow, 82; white-throated sparrow, 138; fox sparrow, 2; swamp sparrow, 86; song sparrow, 152. **Total,** 90 species; about 9064 individuals. (The low numbers of waterfowl were due to the severe freeze. Robert E. Stewart and Clark G. Webster visited the Elliott Island area 4 days later after the ice had melted and estimated: black duck, 10,000; baldpate, 400; pintail, 400; green-winged teal, 100; hooded merganser, 2).—Elting Arnold, Thomas W. Donnelly, Seth H. Low, Chandler S. Robbins, John W. Taylor, W. Steele Webster, John E. Willoughby.

118. Susquehanna Flats-Sassafras River, Md. (same area and habitat coverage as last year).—Dec. 26; 6:50 a.m. to 5 p.m. Clear; temp. 10° to 22°; wind NW, 10-20 m.p.h. (gusts to 30); ground bare; Chesapeake Bay 90% frozen, Sassafras River partly open; mouth of Susquehanna River open. Observers in pairs. Total party-hours, 15 (9 on foot, 6 in car); total miles, 140 (10 on foot, 130 by car). Horned grebe, 1; pied-billed grebe, 5; great blue heron, 4; whistling swan, 840; Canada goose, 485; mallard, 354; black duck, 1446; gadwall, 18; European widgeon, 1 (J.E.W., J.W.T.); baldpate, 323; pintail, 168; green-winged teal, 1; shoveller, 15; redhead, 80; ring-necked duck, 426; canvas-back, 4935; scaup duck (at least 3 greater scaup), 776; Am. golden-eye, 44; buffle-head, 34; old-squaw, 3; ruddy duck, 48; Am. merganser, 8; red-breasted merganser, 3; turkey vulture, 26; sharp-shinned hawk, 2; Cooper's hawk, 2; red-tailed hawk, 6; red-shouldered hawk, 1; bald eagle, 11; marsh hawk, 3; sparrow hawk, 3; Am. coot, 235; killdeer, 3; herring gull, 54; ring-billed gull, 21; yellow-shafted flicker, 1; red-bellied woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 3; horned lark, 4; Am. crow, 51; fish crow, 15; Carolina chickadee, 3; tufted titmouse, 6; winter wren, 2; mockingbird, 2; hermit thrush, 2; eastern bluebird, 6; golden-crowned kinglet, 1; Am. pipit, 7; starling, 677; myrtle warbler, 3; English sparrow, 285; eastern meadowlark, 36; red-wing, 800,000 (between 500,000 and 2,000,000); rusty blackbird, 2; purple grackle, 200,000 (est. from sparrow, 9. **Total,** 67 species; about 1,011,883 percentage of grackles in the nearer flocks of blackbirds); brown-headed cowbird, 48; cardinal, 43; Am. goldfinch, 115; eastern towhee, 1; slate-colored junco, 91; tree sparrow, 60; field sparrow, 1; white-throated sparrow, 20; fox sparrow, 2; song individuals. (Freezing of the bay the night before had driven thousands of waterfowl out of the census area; *cf.* 13,870 canvas-backs last year. The blackbird flight was observed from the south shore of the Sassafras River in the early morning, and checked from the north shore as the birds returned in the evening; only part of this flight was seen last year.)—Edwin G. Davis, Napier Shelton, John W. Taylor, John E. Willoughby.

119. Triadelphia Reservoir (Montgomery Co.), Md. (farm at Unity, by car to and from reservoir, and on foot along west shore; lake 50%, open farmland 25%, woodlands and planted conifers 25%).—Jan. 2; 8 to 10 a.m., 12 m. to 5 p.m. Partly cloudy to clear; temp. 30° to 35°; wind NW, 8-12 m.p.h.; ground bare; lake 5% frozen, probably all frozen first of week. Two observers together. Total hours, 7 (6 on foot, 1 by car); total miles, 15 (5 by foot, 10 by car). Common loon, 1; mallard, 38; black duck, 90; redhead, 2; Am. merganser, 41; turkey vulture, 42; black vulture, 11; red-tailed hawk, 1; sparrow hawk, 7; mourning dove, 2; horned owl, 2; yellow-shafted flicker, 2; red-bellied woodpecker, 3; downy woodpecker, 4; blue jay, 8; Am. crow, 6; Carolina chickadee, 40; tufted titmouse, 4; white-breasted nuthatch, 4; brown creeper, 4; Carolina wren, 2; mockingbird, 1; hermit thrush, 1; eastern bluebird, 3; loggerhead shrike (migrant), 1; starling, 5; English sparrow, 5; eastern meadowlark, 1; cardinal, 7; Am. goldfinch, 7; slate-colored junco, 36; tree sparrow, 112; field sparrow, 16; white-throated sparrow, 18; song sparrow, 19. **Total,** 35 species; 546 individuals. (Trapped at banding station Dec. 25, white-crowned sparrow, 2.)—Seth H. Low, Fred M. Packard.

120. Wicomico (Charles Co.), Md. (7½-mile radius centered 1 mile northeast of Tompkinsville, and including all of the Wicomico River, Chaptico, White's Neck, Cobb Is., and Cobb Neck north to Pope's Creek on the Potomac River; tidal rivers and creeks 50%, fields 25%, coniferous and deciduous woods 25%).—Dec. 26; 7 a.m. to 4:15 p.m. Clear; temp. 15° to 28°; wind NW, 15 m.p.h.; ground bare; creeks, bays, and first 3 miles of Wicomico River frozen for first time this winter. Six observers in 3 parties. Total hours, 28 (19 on foot, 9 in car); total miles, 187 (15 on foot, 172 by car). Horned grebe, 73; great blue heron, 2; whistling swan, 20; Canada goose, 32; mallard, 36; black duck, 114; gadwall, 1095 (1000 conservative est., 95); baldpate, 2670; pintail, 550; green-

winged teal, 5; redhead, 145; ring-necked duck, 78; canvas-back, 5300; scaup duck (sp.), 10; Am. golden-eye, 116; buffle-head, 27; old-squaw, 1; ruddy duck, 2070; hooded merganser, 6; Am. merganser, 242; red-breasted merganser, 3; turkey vulture, 49; black vulture, 13; red-tailed hawk, 11; red-shouldered hawk, 3; rough-legged hawk, 1; bald eagle, 10; marsh hawk, 21; sparrow hawk, 8; bob-white, 15; coot, 3060; killdeer, 35; Wilson's snipe, 6; herring gull, 143; ring-billed gull, 5; Bonaparte's gull, 1; mourning dove, 48; belted kingfisher, 5; yellow-shafted flicker, 17; red-bellied woodpecker, 9; yellow-bellied sapsucker, 1; hairy woodpecker, 2; downy woodpecker, 12; horned lark, 47; blue jay, 29; Am. crow, 218; Carolina chickadee, 47; tufted titmouse, 42; brown creeper, 4; winter wren, 1; Carolina wren, 25; mockingbird, 23; catbird, 1; brown thrasher, 1; robin, 29; hermit thrush, 3; eastern bluebird, 51; golden-crowned kinglet, 34; ruby-crowned kinglet, 3; Am. pipit, 165; starling, 300; myrtle warbler, 90; English sparrow, 108; eastern meadowlark, 154; red-wing, 1500; brown-headed cowbird, 95; cardinal, 93; pine siskin, 4; Am. goldfinch, 67; eastern towhee, 19; Savannah sparrow, 12; slate-colored junco, 256; tree sparrow, 148; field sparrow, 158; white-throated sparrow, 290; fox sparrow, 1; swamp sparrow, 1; song sparrow, 71. **Total,** 78 species; about 20,460 individuals.—John W. Aldrich, Thomas W. Donnelly, Seth H. Low, Chandler S. Robbins, Robert E. Stewart, Francis M. Uhler.

121. Washington, D.C. (same area as in past 3 years; water 20%, marsh 5%, brushy swamp 5%, bottomland woods 25%, upland deciduous woods 25%, pine woods 5%, fields 5%, suburban 10%, plus 4 feeding-station reports.—Jan. 2; 6:15 a.m. to 4:45 p.m. Fair in morning, cloudy in afternoon; temp. 30° to 45°; wind up to 10 m.p.h.; ground bare; water open. Forty-one observers in 7 parties, plus 3 others at feeding stations. Total hours, 103 (12 in car, 91 on foot); total miles, 274 (165 by car, 109 on foot). Pied-billed grebe, 2; great blue heron, 13; black-crowned night heron, 18; Canada goose (lesser, *B. c. leucopareia*—J.W.A.), 1; mallard, 105; black duck, 777; pintail, 371; green-winged teal, 67; wood duck, 4; canvas-back, 4; scaup duck (sp.), 14 (1 identified as greater—E.G.D.); old-squaw, 1; ruddy duck, 15; Am. merganser, 684; red-breasted merganser, 2; turkey vulture, 147; black vulture, 7; sharp-shinned hawk, 8; Cooper's hawk, 7; red-tailed hawk, 10; red-shouldered hawk, 11; bald eagle, 14; marsh hawk, 2; peregrine falcon, 2 (reported by 3 parties); pigeon hawk, 3 (Rock Creek Park—M.D.); sparrow hawk, 21; bob-white, 36; Am. coot, 4; killdeer, 29; Wilson's snipe, 2; herring gull, 1186; ring-billed gull, 494; laughing gull, 3 (I.R.B.); mourning dove, 26; barn owl, 1 (5 eggs, Smithsonian Institution tower); screech owl, 2; barred owl, 4; belted kingfisher, 5; yellow-shafted flicker, 42; red-bellied woodpecker, 37; red-headed woodpecker, 1; yellow-bellied sapsucker, 3; hairy woodpecker, 16; downy woodpecker, 98; blue jay, 138; Am. crow, 747; fish crow, 27; Carolina chickadee, 288; tufted titmouse, 294; white-breasted nuthatch, 114; brown creeper, 17; winter wren, 12; Carolina wren, 86; long-billed marsh wren, 1; mockingbird, 60; catbird, 2; brown thrasher, 1; robin, 6; hermit thrush, 4; eastern bluebird, 106; golden-crowned kinglet, 60; ruby-crowned kinglet, 6; cedar waxwing, 14; starling, 14,163; myrtle warbler, 41; English sparrow, 507; red-wing, 631; rusty blackbird, 22; purple grackle, 2; cardinal, 342; purple finch, 26; pine siskin, 2; Am. goldfinch, 323; eastern towhee, 6; Savannah sparrow, 1; slate-colored junco, 769; tree sparrow, 245; field sparrow, 125; white-throated sparrow, 746; fox sparrow, 10; swamp sparrow, 27; song sparrow, 291. **Total,** 82 species; 24,561 individuals. John W. Aldrich, Ernest Baldwin, Irston R. Barnes, Robert Bartl, Robert J. Beaton, Fern Bell, Shirley Briggs, Catherine Crone, Edwin G. Davis, Malcolm Davis, Carl Dianda, Thomas Donnelly, Dorothy Dreese, Philip A. DuMont, Robert L. Farr, A. H. Fast, Mary Goldman, Fred Griffin, Nancy Jenison, J. Enoch Johnson, Katherine Keeley, Francis MacNutt, Charles N. Mason, Gerald Mersereau, Roger Tory Peterson, Charles L. Preston, Eleanor Price, Napier Shelton, Elizabeth Slater, Hilda Smith, Harold B. Stabler, E. Jeanne Stivers, John Taylor, Jr., Donald M. Thatcher, Hazel Thatcher, Joanna Tousey, Richard Tousey, Ruth L. Tousey, Karl Trever, Martha Trever, Jane Tuttrup, Jack Wells, Lorina M. Wendt, John E. Willoughby (Audubon Society of the District of Columbia).

122. Back Bay National Wildlife Refuge, Va. (refuge area including Long Island, ocean beach from refuge north to Sandbridge, and woods and farmland around Sigma, Pungo, and Pleasant Ridge; open farmland 8%, pine woodland 12%, deciduous woodland 10%, ocean beach 20%, marshes and inland bay 50%).—Jan. 2; 6 a.m. to 6 p.m. Clear; temp. 38° to 47°; wind W, 8-18 m.p.h.; ground bare; water open. Eight observers in 2 and 3 parties in early a.m., 12 observers together for rest of day. Total hours, 15 (12 on foot, 1 in motorboat, 2 in truck along beach and marsh road); total miles, 23 (6 on foot, 4 in boat, 13 in truck). Common loon, 21; red-throated loon, 34 (200 est. loons, seen migrating off shore at dawn, were probably of this species); horned grebe, 30; pied-billed grebe, 10; gannet, 3; great blue heron, 2; black-crowned night heron, 13; Am. bittern, 2; whistling swan, 1000 (est.); Canada goose, 3780 (3500 est., 280—1 Hutchins's hardly half the size of the other Canada geese, was seen and compared with the other geese both at rest and in flight—R.A.B., L.L.W.); snow goose, 3000

(est.); blue goose, 1; mallard, 50 (est.); black duck, 500 (est.); baldpate, 800 (est.); pintail, 100 (est.); green-winged teal, 6; redhead, 500 (est.); ring-necked duck, 603; canvas-back, 1500 (est.); scaup duck (sp.), 206 (200 est., 6); Am. golden-eye, 7; buffle-head, 12; old-squaw, 10; white-winged scoter, 2; surf scoter, 6; Am. scoter, 12; ruddy duck, 28; hooded merganser, 8; Am. merganser, 37; red-breasted merganser, 22; turkey vulture, 9; black vulture, 37; red-tailed hawk, 1; red-shouldered hawk, 1; rough-legged hawk, 2; bald eagle, 14; marsh hawk, 14; peregrine falcon, 2; sparrow hawk, 7; Am. coot, 3000 (est.); killdeer, 2; woodcock, 1; lesser yellow-legs, 1 (L.L.W.); least sandpiper, 25; western sandpiper, 3; sanderling, 38; great black-backed gull, 2; herring gull, 115 (100 est., 15); ring-billed gull, 294 (250 est., 44); laughing gull, 3; Bonaparte's gull, 8; mourning dove, 2; barn owl, 1; belted kingfisher, 2; yellow-shafted flicker, 25; pileated woodpecker, 3; red-bellied woodpecker, 3; downy woodpecker, 7; horned lark (northern), 60 (est.); common raven, 1 (characteristics of flight and size noted—L.L.W.; this species has been recorded before on the Virginia coast); Am. crow, 37; fish crow, 7; Carolina chickadee, 9; tufted titmouse, 6; white-breasted nuthatch, 2; brown-headed nuthatch, 13; house wren, 3 (seen by 2 parties—F.R.S., C.E.S., L.L.W.); winter wren, 3; Carolina wren, 25; short-billed marsh wren, 13; mockingbird, 5; catbird, 10; brown thrasher, 2; robin, 161; hermit thrush, 5; eastern bluebird, 19; ruby-crowned kinglet, 10; Am. pipit, 56; cedar waxwing, 4; starling, 6; myrtle warbler, 234; pine warbler, 4; yellow-throat, 2; English sparrow, 13; eastern meadowlark, 41; red-wing, 1011 (500 est., 511); rusty blackbird, 1; purple grackle, 1; brown-headed cowbird, 6; cardinal, 28; purple finch, 17; pine siskin, 6; Am. goldfinch, 536; eastern towhee, 8; Savannah sparrow, 12; slate-colored junco, 10; tree sparrow, 1 (K.L., C.E.S., L.L.W., *et al.*); chipping sparrow, 2; field sparrow, 10; white-throated sparrow, 127; fox sparrow, 4; swamp sparrow, 119; song sparrow, 109; Lapland longspur, 1 (L.L.W.). **Total,** 105 species (1 additional subspecies); about 18,687 individuals. (Seen in area Dec. 29: double-crested cormorant, 1; black-bellied plover, 2; Wilson's snipe, 4; hairy woodpecker, 3; palm warbler (western), 1; sharp-tailed sparrow, 9.) A bad cold spell several days before count froze up a large part of upper Back Bay and caused most of the waterfowl to move south to Currituck Sound.—R. A. Beasley, Harold Coolidge, N. J. Coolidge, T. R. Coolidge, Kenneth Lawless, Mr. and Mrs. Jack E. Perkins, Mr. and Mrs. A. C. Reed, F. R. Scott, C. E. Stevens, Jr., Lester L. Walsh (members and guests, Virginia Society of Ornithology).

123. Blacksburg (Montgomery Co.), Va. (V.P.I. campus and farm, Strouble's Creek to New River, Brush Mt. and Tom's Creek to New River, along New River from mouth of Strouble's Creek to Goodwin's Ferry; same course as last year; woods 45%, farmland 35%, river-bottom 20%).—Dec. 27; 6:30 a.m. to 5:30 p.m. Clear; temp. 3° to 30°; wind SW, 8-12 m.p.h. on mountain tops early a.m., calm in valleys; ground covered with 1-3-in. snow; all marshes except about springs frozen. Six observers in 4 parties. Total hours, 38 (36 on foot, 2 in car used by 1 party in shifting from place to place and in picking up 2 other parties at end of day); total miles, 85 (55 on foot, 30 by car). Common loon, 1; pied-billed grebe, 2; mallard, 218; black duck, 211; gadwall, 4; pintail, 1; green-winged teal, 21; blue-winged teal, 1; baldpate, 29; wood duck, 2; ring-necked duck, 2; Am. golden-eye, 12; buffle-head, 2; hooded merganser, 17; unidentified ducks (probably Am. golden-eye), 75; turkey vulture, 13; black vulture, 8; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 9; ruffed grouse, 2; bob-white, 44 (6 coveys); Am. coot, 1; killdeer, 14; Wilson's snipe, 14; rock dove (feral), 22; mourning dove, 36 (remains of another which had been killed by a red fox during the previous night); screech owl, 3; horned owl, 1; barred owl, 2; belted kingfisher, 5; yellow-shafted flicker, 7; pileated woodpecker, 3; red-bellied woodpecker, 5; red-headed woodpecker, 3; yellow-bellied sapsucker, 1; hairy woodpecker, 4; downy woodpecker, 25; eastern phoebe, 1; horned lark, 95; blue jay, 24; Am. crow, 161; Carolina chickadee, 160; tufted titmouse, 86; white-breasted nuthatch, 21; red-breasted nuthatch, 10; brown creeper, 15; winter wren, 14; Carolina wren, 25; mockingbird, 14; hermit thrush, 9; eastern bluebird, 23; golden-crowned kinglet, 95; ruby-crowned kinglet, 2; loggerhead shrike, 5; starling, 224; myrtle warbler, 2; English sparrow, 121; eastern meadowlark, 60; red-wing, 2; rusty blackbird, 10; cardinal, 156; purple finch, 24; Am. goldfinch, 152; eastern towhee, 1; slate-colored junco, 729; tree sparrow, 282; field sparrow, 60; white-crowned sparrow, 119; white-throated sparrow, 10; song sparrow, 167. **Total,** 73 species; about 3706 individuals. (Seen in area Dec. 25, green heron, 1—found dead on Dec. 27; Dec. 26, robin, 1.)—C. O. Handley, Sr. and Jr., John M. Handley, Robert J. Watson, J. W. Murray, W. R. DeGarmo.

124. Brooke, Va. (4 areas within 5½ miles of Brooke, including immediate environs of Brooke, point between mouth of Aquia Creek and Potomac River and southeast of railroad, open country on southwest side of Aquia Creek at mouth, and lower 4 miles of Accakeek Creek including point between this creek and Potomac River at mouth of Potomac Creek; waterfront 25%, marsh 8%, open fields 8%, hedgerows 5%, mixed forest edge

30%, deciduous slash 5%, deciduous forest 19%). —Dec. 27; 8 a.m. to 5 p.m. Fair; temp. 12° to 36° to 34°; mid-day wind WSW, 5-7 m.p.h.; ground bare; bays at mouths of large creeks frozen except for a few open cracks, Potomac frozen along bank, large floes of floating ice in main channel. Four observers working singly or in pairs. Total hours, 21½; total miles, 10. Great blue heron, 16; whistling swan, 180; Canada goose, 30; mallard, 40; black duck, 450; baldpate, 13; redhead, 2; ring-necked duck, 8; canvas-back, 8; lesser (?) scaup duck, 10; Am. golden-eye, 8; buffle-head, 1; ruddy duck, 8; hooded merganser, 4; Am. merganser, 90; red-breasted merganser, 2; turkey vulture, 20; black vulture, 3; Cooper's hawk, 1; red-tailed hawk, 4; bald eagle, 10; marsh hawk, 2; sparrow hawk, 1 Am. coot, 25; killdeer, 5; herring gull, 30; ring-billed gull, 90; Bonaparte's gull, 3; mourning dove, 8; belted kingfisher, 1; yellow-shafted flicker, 11; pileated woodpecker, 2; red-bellied woodpecker, 7; red-headed woodpecker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 5; downy woodpecker, 14; eastern phoebe, 1; blue jay, 13; Am. crow, 60; fish crow, 1; Carolina chickadee, 40; tufted titmouse, 15; brown creeper, 2; winter wren, 4; Carolina wren, 15; mockingbird, 8; robin, 20; hermit thrush, 5; eastern bluebird, 62; golden-crowned kinglet, 5; ruby-crowned kinglet, 1; cedar waxwing, 60; starling, 18; myrtle warbler, 25; English sparrow, 30; eastern meadowlark, 45; red-wing, 100; rusty blackbird, 31; cardinal, 50; purple finch, 8; pine siskin, 4; Am. goldfinch, 120; eastern towhee, 3; Savannah sparrow, 5; slate-colored junco, 65; tree sparrow, 60; field sparrow, 5; white-throated sparrow, 100; swamp sparrow, 7; song sparrow, 100. **Total,** 71 species; about 2202 individuals.—A. A. Baker, Edwin T. McKnight, Thomas B. Nolan, W. W. Rubey.

125. Charlottesville, Va. (city reservoir, Albemarle Lake, Henley's Lake, Thraves Pond, Bellair Pond, Whitehall, Barracks Road area, 6 miles along Rivanna and South Fork Rivanna River from Burnt Mills to Hotops Cliff, plus 1 feeding station in town; farmland 35%, lakes and ponds 25%, river-bottom 20%, deciduous woods 10%, pine woods 5%, city 5%).—Dec. 30; 6:45 a.m. to 5:15 p.m. Rain accompanied by 5-25 m.p.h. SW wind during most of day; rain ceased and wind increased to 20-30 m.p.h. in late afternoon; temp. 33° to 44°; lowlands partially flooded. Four observers in 4 parties, plus 1 other at feeding station. Total hours, 36; total miles, 166 (146 by car, 20 afoot). Pied-billed grebe, 1; great blue heron, 1; mallard, 49; scaup duck (sp.), 1; buffle-head, 1; hooded merganser, 1; Am. merganser, 1; turkey vulture, 20; black vulture, 20; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 1; sparrow hawk, 3; bob-white, 10; killdeer, 1; Wilson's snipe, 2; mourning dove, 103; barred owl, 1; belted kingfisher, 4; yellow-shafted flicker, 6; pileated woodpecker, 5; red-bellied woodpecker, 9; red-headed woodpecker, 4; hairy woodpecker, 2; downy woodpecker, 13; horned lark (prairie), 24; blue jay, 54; common raven, 1 (croaking and being harassed by several crows—F.R.S.); Am. crow, 606; fish crow, 1; Carolina chickadee, 88; tufted titmouse, 30; white-breasted nuthatch, 8; red-breasted nuthatch, 1; brown creeper, 3; winter wren, 2; Carolina wren, 16; mockingbird, 10; robin, 7; hermit thrush, 6; eastern bluebird, 68; golden-crowned kinglet, 104; ruby-crowned kinglet, 15; cedar waxwing, 8; loggerhead shrike, 2; starling, 174; myrtle warbler, 6; English sparrow, 30; eastern meadowlark, 1; red-wing, 1; brown-headed cowbird, 217; cardinal, 160; purple finch, 40; Am. goldfinch, 184; slate-colored junco, 433; tree sparrow, 86; chipping sparrow, 2; field sparrow, 101; white-throated sparrow, 147; fox sparrow, 4; swamp sparrow, 4; song sparrow, 102. **Total,** 62 species; about 3008 individuals. The raven is a resident in the Blue Ridge about 18 miles west of Charlottesville, but this is our first record of a bird outside of the mountains.—John H. Grey, Jr., Kenneth Lawless, Fred R. Scott, Charles E. Stevens, Jr., Mrs. Harrison Whiteman.

126. Danville (Pittsylvania Co.), Va. (within 7-mile radius of town; golf course 5%, Dan River Lakes 15%, river bottomland 10%, roadsides and open fields 50%, deciduous woods 10%, pine woods 10%).—Dec. 29; 7:30 a.m. to 5 p.m. Cloudy and mild with gentle winds and scattered showers; temp. 42° to 58°; wind NW; 5-10 m.p.h.; part of lake frozen, swamp and river open. Four observers together. Total hours, 9½ (3 on foot, 6½ is car); total miles, 55 (5 on foot, about 50 in car). Hooded merganser, 1; turkey vulture, 17; black vulture, 7; marsh hawk, 1; sparrow hawk, 1; killdeer, 5; mourning dove, 8; yellow-shafted flicker, 5; red-bellied woodpecker, 4; red-headed woodpecker, 2; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 1; horned lark, 200 (est.); blue jay, 8; Am. crow, 21; Carolina chickadee, 11; tufted titmouse, 10; red-breasted nuthatch, 1; brown-headed nuthatch, 3; brown creeper, 2; Carolina wren, 7; mockingbird, 8; robin, 72; hermit thrush, 1; eastern bluebird, 25; golden-crowned kinglet, 19; cedar waxwing, 2; starling, 150 (est.); myrtle warbler, 8; pine warbler, 1; English sparrow, 29; eastern meadowlark, 13; cardinal, 6; Am. goldfinch, 62; eastern towhee, 2; slate-covered junco, 200 (est.); field sparrow, 10; white-throated sparrow, 42; song sparrow, 18. **Total,** 41 species; about 987 individuals. (Observed Dec. 28, brown thrasher, 2; Dec. 31; baldpate, 1.)—Johnny Westbrook, Steve Bendall, Jim Overbey, Royster Lyle.

127. Fairfield (Rockbridge Co.), Va. (village of Fairfield north and east to South River, along river to mouth of Irish Creek, 8 miles from Fairfield, and return; village yards and gardens 10%, open fields 30%, hardwood forest 30%, stream banks 30%).—Dec. 28; 7 a.m. to 5 p.m. Clear; temp. 30° to 44°; no wind; ground frozen in morning, light snow in shaded places, ice on still water. Total miles, 20 (8 on foot, 12 by car). Turkey vulture, 12; black vulture, 20 (about 100 vultures seen roosting in trees across South River late in afternoon, too far away to identify); sparrow hawk, 2; mourning dove, 3; yellow-shafted flicker, 1; red-bellied woodpecker, 1; downy woodpecker, 1; blue jay, 6; Am. crow, 21; black-capped chickadee, 1; Carolina chickadee, 3; tufted titmouse, 1; mockingbird, 9; robin, 3; eastern bluebird, 10; loggerhead shrike, 3; starling, 39; myrtle warbler, 1; eastern meadowlark, 4; English sparrow, 35; red-wing, 3; cardinal, 27; Am. goldfinch, 5; slate-colored junco, 18; tree sparrow, 5; field sparrow, 12; white-throated sparrow, 12; song sparrow, 5. **Total,** 28 species; 366 individuals.—Rev. and Mrs. W. B. Clemmons, Anne, Martha and Bill Clemmons, Jr.

128. Fort Belvoir, Va. (Belvoir peninsula; Accotink Bay, Gunston Cove, Potomac River adjacent to the peninsula, Dogue Creek, and post property north to Telegraph Road; open farmland 40%, deciduous woodland 40%, pine groves 15%, cattail marsh 5%).—Jan. 2; 7:45 a.m. to 4:50 p.m. Clear to 10:30 a.m. when high overcast moved in from SW; temp. 30° to 41° to 38°; wind SW, 1-7 m.p.h.; ground bare but frozen; all water ice-free, river at low tide at 3:30 p.m. Two observers together by car between favorable spots, separated on foot. Total hours, 9 (6 on foot, 3 by car); total miles, 21 (13 by car, 8 on foot). Pied-billed grebe, 2; great blue heron, 1; mallard, 3; black duck, 52; buffle-head, 4; old-squaw, 1; Am. merganser, 59; turkey vulture, 14; red-tailed hawk, 8; red-shouldered hawk, 5; bald eagle, 14; marsh hawk, 3; sparrow hawk, 1; bob-white, 8; killdeer, 7; herring gull, 26; ring-billed gull, 64; mourning dove, 113 (50 est., 63); barred owl, 2; yellow-shafted flicker, 7; pileated woodpecker, 2; hairy woodpecker, 7; downy woodpecker, 9; red-bellied woodpecker, 16; horned lark (prairie), 4; blue jay, 55; Am. crow, 98; Carolina chickadee, 33; tufted titmouse, 24; white-breasted nuthatch, 17; red-breasted nuthatch, 2; brown creeper, 1; winter wren, 2; Carolina wren, 5; mockingbird, 7; robin, 14; eastern bluebird, 11; starling, 60; myrtle warbler, 65 (20 est., 45); English sparrow, 48; eastern meadowlark, 102 (30 est., 72); red-wing, 3; rusty blackbird, 33; cardinal, 5; Am. goldfinch, 8; slate-colored junco, 182; tree sparrow, 73; field sparrow, 25; white-throated sparrow, 15; swamp sparrow, 4; song sparrow, 20. **Total,** 51 species; about 1344 individuals. (Seen in area Dec. 28: sharp-shinned hawk, 1; belted kingfisher, 1; pine siskin, 1.)—J. M. Abbott, G. H. Sigel.

129. Harrisonburg, Va. (Waterman wood to Tide Spring, a total distance of 12 miles including oak-hickory-cedar-pine woodlot 60%, oak-hickory woodlot 10%, small village bordering school campus 10%, cedar-pine wasteland 10%, pasture field and fence rows 10%).—Dec. 27; 8 a.m. to 3 p.m. Partly cloudy; temp. 19° to 37°; wind SE, 0-10 m.p.h.; ground frozen and covered with light snow. Three observers within calling distance. Total hours, 7 (on foot); total miles, 8 (on foot). Turkey vulture, 28; red-tailed hawk, 2; sparrow hawk, 3; yellow-shafted flicker, 3; pileated woodpecker, 2; red-bellied woodpecker, 1; downy woodpecker, 15; Am. crow, 92; Carolina chickadee, 22; tufted titmouse, 26; white-breasted nuthatch, 20; mockingbird, 12; robin, 2; eastern bluebird, 41; starling, 181; myrtle warbler, 1; English sparrow, 144; cardinal, 43; purple finch, 25; Am. goldfinch, 6; slate-colored junco, 86; tree sparrow, 45; white-throated sparrow, 1; song sparrow, 2. **Total,** 21 species; 803 individuals.—Daniel B. Suter, Richard Weaver, D. Ralph Hostetter.

130. Lexington, Va. (almost same area as in former years; town 5%, Big Spring Pond 5%, farmland 25%, cedar woods 35%, oak woods, 20%, scrub 10%).—Dec. 27; 8 a.m. to 5 p.m., 40 minutes out for lunch. Clear; temp. 9° to 43°; practically no wind; ground frozen; streams bordered with ice, Big Spring Pond open. Seven observers in 1 party, 6 all day and 1 half time. Total hours, 8¼; total miles, 31.7 (11.4 on foot, 20.3 in car). Great blue heron, 3; mallard, 13; black duck, 15; turkey vulture, 19; red-tailed hawk, 1; marsh hawk, 1; sparrow hawk, 2; Wilson's snipe, 1; belted kingfisher, 3; yellow-shafted flicker, 2; pileated woodpecker, 3; red-bellied woodpecker, 3; red-headed woodpecker, 1; downy woodpecker, 4; hairy woodpecker, 1; horned lark, 6; blue jay, 15; Am. crow, 132; Carolina chickadee, 32; tufted titmouse, 16; white-breasted nuthatch, 6; brown creeper, 2; winter wren, 2; Carolina wren, 10; mockingbird, 9; robin, 3; hermit thrush, 1; eastern bluebird, 15; golden-crowned kinglet, 6; loggerhead shrike (migrant), 3; starling, 45; myrtle warbler, 14; English sparrow, 66; eastern meadowlark, 11; cardinal, 44; Am. goldfinch, 7; purple finch, 13; slate-colored junco, 100; field sparrow, 4; tree sparrow, 52; white-throated sparrow, 122; song sparrow, 15. **Total,** 42 species; 823 individuals.—R. P. Carroll, Alice Carroll, W. L. Richards, F. M. Yellott, Robert Paxton, Robert Moses, Joe Magee.

131. Lynchburg, Va. (Timber Lake area, College Lake area, Airport, Graves' Mill and Toma-

hawk Swamp area, Rivermont Park; fields, 28%, open woods 63%, lakes and marshes 9%).—Dec. 27; 7 a.m. to 5:30 p.m. Clear most of day, some cirrus around noon; temp. 10° to 40° to 39°; wind SSW to WSW, 0-15 m.p.h.; ground covered with 1-in. snow; lakes mostly frozen, streams open. Five observers, 2 parties in a.m., 1 party in p.m. Total hours 32 (28 on foot, 4 in car); total miles, 132 (30 on foot, 102 in car). Pied-billed grebe, 1; turkey vulture, 9; black vulture, 13; Cooper's hawk, 2; sparrow hawk, 1; mourning dove, 12; screech owl, 1; yellow-shafter flicker, 6; red-bellied woodpecker, 3; red-headed woodpecker, 5; yellow-bellied sapsucker, 3; hairy woodpecker, 1; downy woodpecker 9; horned lark (prairie), 9; blue jay, 33; Am. crow, 52; Carolina chickadee, 24; tufted titmouse, 9; white-breasted nuthatch, 8; red-breasted nuthatch, 1; brown creeper, 5; winter wren, 2; Carolina wren, 11; mockingbird, 9; robin, 21; hermit thrush, 2; eastern bluebird, 30; golden-crowned kinglet, 55; ruby-crowned kinglet, 27; starling, 17; myrtle warbler, 6; pine warbler, 3; eastern meadowlark, 5; rusty blackbird, 17; cardinal, 39; purple finch, 33; pine siskin, 12; Am. goldfinch, 55; eastern towhee, 6; Savannah sparrow, 1; slate-colored junco, 188; tree sparrow, 136; chipping sparrow, 1; field sparrow, 23; white-throated sparrow, 37; fox sparrow, 10; swamp sparrow, 1; song sparrow, 15. **Total,** 48 species; 969 individuals.—Jane Freer, Ruskin S. Freer, Kenneth Lawless, Herbert Nagin, M. B. Tillotson.

132. Richmond, Va. (same area as in 4 preceding years; open farmland 30%, pine woodland 12%, deciduous woodland 10%, residential districts 8%, maple-gum swamp 20%, marshes and river shore 20%).—Dec. 26; 6:45 a.m. to 6 p.m. Clear; temp. 15° to 31°; wind N, 5-12 m.p.h.; ground covered with up to 1 in. of snow; marshes frozen, lakes and backwaters 30% frozen. Two observers together most of day. Total hours, 11 (on foot); total miles, 42 (35 by car, 7 on foot). Pied-billed grebe, 9; great blue heron, 1; Canada goose, 3000 (est.); snow goose, 1; mallard, 308 (250 est., 58); black duck, 369 (350 est., 19); baldpate, 25; pintail, 202 (200 est., 2); wood duck, 3; ring-necked duck, 77; lesser scaup duck, 18; ruddy duck, 6; hooded merganser, 8; Am. merganser, 121; red-breasted merganser, 4; turkey vulture, 38; black vulture, 24; Cooper's hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 1; bald eagle, 4; marsh hawk, 1; sparrow hawk, 1; turkey, 1 (fresh tracks); Am. coot, 90; killdeer, 3; Wilson's snipe, 33; herring gull, 6; ring-billed gull, 68; mourning dove, 14; belted kingfisher, 1; yellow-shafted flicker, 25; pileated woodpecker, 6; red-bellied woodpecker, 15; yellow-bellied sapsucker, 3; hairy woodpecker, 4; downy woodpecker, 10; eastern phoebe, 1; horned lark, 255 (northern, 5, prairie, 250 est.); blue jay, 7; Am. crow, 149; Carolina chickadee, 40; tufted titmouse, 22; white-breasted nuthatch, 12; brown creeper, 13; winter wren, 1; Carolina wren, 16; mockingbird, 19; hermit thrush, 7; eastern bluebird, 58; golden-crowned kinglet, 46; ruby-crowned kinglet, 9; cedar waxwing, 14; starling, 361 (300 est., 61); myrtle warbler, 111; pine warbler, 5; English sparrow, 28; eastern meadowlark, 69; red-wing, 80; brown-headed cowbird, 4; cardinal, 97; purple finch, 6; Am. goldfinch, 60; eastern towhee, 14; Savannah sparrow, 1; slate-colored junco, 236; field sparrow, 48; white-throated sparrow, 266; fox sparrow, 1; swamp sparrow, 7; song sparrow, 29. **Total,**; 71 species (1 additional subspecies); about 6597 individuals.—F. R. Scott, C. E. Stevens, Jr.

133. Shenandoah National Park, Va. (Big Meadows, Fishers Gap, Hawksbill, Cedar Run Trail from Hawksbill Gap to White Oak Canyon, Skyland, Stony Man, Old Rag Fire Road from Limberlost to within a mile of Old Rag Post Office; altitude 2300-4049 ft.; deciduous woods 70%, abandoned fields 20%, hemlock groves 5%, birch scrub 3%, pine woods 2%).—Dec. 29; 7:30 a.m. to 4:30 p.m. Intermittent fog and drizzle; temp. 42° to 48°; wind SSW, 20-40 m.p.h. on ridge; 1-in. snow in sheltered places. Three observers in 2 parties, Total hours, 25; total miles, 74 (55 by car, 19 on foot). Red-tailed hawk, 3; peregrine falcon, 1; ruffed grouse, 5; pileated woodpecker, 2; hairy woodpecker, 2; downy woodpecker, 7; common raven, 1; Carolina chickadee, 29; tufted titmouse, 11; white-breasted nuthatch, 2; red-breasted nuthatch, 1; winter wren, 1; Carolina wren, 1; hermit thrush, 1; golden-crowned kinglet, 7; ruby-crowned kinglet, 1; starling, 3; cardinal, 4; pine siskin, 1; Am. goldfinch, 25; slate-colored junco, 61 (both Carolina and typical slate-colored seen); tree sparrow, 8; white-throated sparrow, 2; song sparrow, 2. **Total,** 24 species (1 additional subspecies); 181 individuals.—Kenneth Lawless, Fred R. Scott, Charles E. Stevens, Jr.

134. Warren (Albemarle Co.), Va. (James River from Hatton to Goosby Island and area about Warren and Rock Castle Creek; river-bottom and flooded lowlands 40%, farmland 30%, deciduous woods 15%, pine woods 15%).—Dec. 31; 7 a.m. to 5 p.m. Cloudy; temp. 32° to 41°; wind W, 10-25 m.p.h. Total hours, 10; total miles, 20 (4 by car, 16 afoot). Black duck, 7; Am. merganser, 1; turkey vulture, 15; black vulture, 29; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 4; sparrow hawk, 3; bob-white, 17; killdeer, 14; mourning dove, 129; yellow-shafted flicker, 6; pileated woodpecker, 3; red-bellied woodpecker, 5; downy woodpecker, 9; horned lark (prairie), 19; blue jay, 58; Am. crow, 408; Carolina chickadee, 51; tufted titmouse, 4; white-breasted nuthatch, 1;

red-breasted nuthatch, 3; winter wren, 5; Carolina wren, 7; mockingbird, 8; robin, 43; eastern bluebird, 57; golden-crowned kinglet, 33; ruby-crowned kinglet, 6; cedar waxwing, 5; loggerhead shrike, 5; starling, 881 (partly est.); myrtle warbler, 6; English sparrow, 14; eastern meadowlark, 49; brown-headed cowbird, 39; cardinal, 56; purple finch, 24; Am. goldfinch, 32; eastern towhee, 2; slate-colored junco, 131; tree sparrow, 31; field sparrow, 33; white-throated sparrow, 54; song sparrow, 31. **Total,** 45 species; about 2343 individuals.—Charles E. Stevens, Jr.

135. Yorktown, Va. (Newport News Reservoir, Harwood's Mill Reservoir, Colonial Battlefield Park including Wormley Lake and waterfront of Yorktown, York River shore from Yorktown northeast to Felgaters Creek, lower part of Back Creek, and woods and marshes along Colonial National Monument Parkway and on the York-Poquoson Rivers peninsula; open farmland 15%, pine woodland 20%, deciduous woodland 13%, bushy fields 7%, marshes and open water 45%).—Dec. 27; 6:15 a.m. to 6 p.m. Clear; temp. 14° to 38°; wind NW, 2-10 m.p.h.; ground covered with snow up to 1 in. deep; marshes frozen, lakes 35% frozen. Two observers together most of day. Total hours, 12 (on foot); total miles, 60 (52 by car, 8 by foot). Common loon, 1; horned grebe, 98; pied-billed grebe, 14; great blue heron, 13; Canada goose, 183; mallard, 1; black duck, 5; gadwall, 84; baldpate, 123; pintail, 22; green-winged teal, 2; redhead, 141; ring-necked duck, 455; canvas-back, 105; scaup duck (sp.), 347; Am. golden-eye, 276; buffle-head, 214; ruddy duck, 1632; hooded merganser, 87; Am. merganser, 115; red-breasted merganser, 6; turkey vulture, 25; black vulture, 6; red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 7; clapper rail, 1; killdeer, 19; Wilson's snipe, 3; herring gull, 56; ring-billed gull, 160; mourning dove, 2; belted kingfisher, 4; yellow-shafted flicker, 6; red-bellied woodpecker, 8; yellow-bellied sapsucker, 1; downy woodpecker, 15; Am. crow, 82; fish crow, 1; Carolina chickadee, 35; tufted titmouse, 25; white-breasted nuthatch, 4; brown-headed nuthatch, 3; brown creeper, 5; Carolina wren, 24; short-billed marsh wren, 3; mockingbird, 7; catbird, 1; brown thrasher, 3; robin, 23; hermit thrush, 6; eastern bluebird, 12; golden-crowned kinglet, 48; ruby-crowned kinglet, 12; Am. pipit, 21; starling, 54; myrtle warbler, 441; pine warbler, 7; English sparrow, 23; eastern meadowlark, 105; red-wing, 5; brown-headed cowbird, 1; cardinal, 30; purple finch, 2; Am. goldfinch, 43; eastern towhee, 41; Savannah sparrow, 10; sharp-tailed sparrow, 3; slate-colored junco, 192; field sparrow, 29; white-throated sparrow, 179; fox sparrow, 27; swamp sparrow, 18; song sparrow, 69. **Total,** 74 species; about 5843 individuals.—F. R. Scott, C. E. Stevens, Jr.

136. Asheville, N.C. (from Beaver Lake south including Biltmore Forest and Vanderbilt Estate, and from Malvern Hills, West Asheville, east to Oteen; open farmland 15%, town suburbs 35%, pine woodland 10%, deciduous and mixed woodland 25%, lake and stream banks 14%, marsh 1%).—Jan. 1; 8 a.m. to 5 p.m. Clear; temp. 23° to 39°; wind 14-17 m.p.h. Twenty-eight observers in 18 parties. Total hours, 46; total miles 48 (40 on foot, 8 by car). Mallard, 31; sharp-shinned hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 1; sparrow hawk, 2; ruffed grouse, 3; bob-white, 19; mourning dove, 14; barred owl, 1; belted kingfisher, 2; yellow-shafted flicker, 10; pileated woodpecker, 2; red-headed woodpecker, 4; yellow-bellied sapsucker, 2; hairy woodpecker, 4; downy woodpecker, 48; eastern phoebe, 1; blue jay, 50; Am. crow, 46; Carolina chickadee, 88; tufted titmouse, 88; white-breasted nuthatch, 76; brown creeper, 6; house wren, 2; winter wren, 3; Carolina wren, 32, mockingbird, 29; robin, 268 (100 est. flying south, 168); hermit thrush, 2; eastern bluebird, 25; golden-crowned kinglet, 2; ruby-crowned kinglet, 1; cedar waxwing, 21; starling, 237 (220 est., 17); red-eyed vireo, 4 (E.B., M.D. [no further details, very doubtful—Ed.]); myrtle warbler, 5; English sparrow, 342; cardinal, 76; purple finch, 79; Am. goldfinch, 31; eastern towhee, 130; slate-colored junco, 249; chipping sparrow, 26; field sparrow, 17; white-crowned sparrow, 1; white-throated sparrow, 281 (196 est., 85); fox sparrow, 8; song sparrow, 48; snow bunting, 22. **Total,** 49 species; about 2342 individuals.—Esther Bloxton, Mrs. Boyce Brannon, Margaret Decker, Mrs. Francis Field, Mrs. Dodette W. Grinnell, Ben Jones, Leland Jones, Mrs. Reed Kitchen, Paul T. Knollman, Billy Lasher, Miss Lawler, Arthur Lawrence, J. N. McCabe, Nicholas McCabe, Jr., Sheila McCabe, Clayton McCracken, Mrs. Marshall Meredith, Bentley Mulford, Mrs. Madeline Murray, R. H. Rembert, Mrs. Charles Richmond, Dr. G. S. Tennent, Mr. and Mrs. W. H. Thorne, Mr. and Mrs. Eugene Ward, T. F. Young.

137. Chapel Hill, N.C. (same area as in last 19 years; oak-hickory woods 20%, pine woods 10%, lowland thickets and open farmland 50%, marsh and lake shores 20%).—Dec. 26; 7 a.m. to 5 p.m. Clear; temp. 12° to 24° to 18°; wind W to NW, 1-7 m.p.h.; ground covered with thin ice; all water bodies had a fringe of thin ice. Four observers in 3 parties. Total hours, 31 (29 on foot, 2 in car); total miles, 34 (19 on foot, 15 by car). Pied-billed grebe, 5; great blue heron, 1; black duck, 21; blue-winged teal, 2; ring-necked duck, 12; greater scaup duck, 66; buffle-head, 8; ruddy duck, 11; turkey vulture, 10; black vulture, 1; Cooper's hawk, 3; red-tailed hawk, 7; red-shouldered hawk, 4; marsh hawk, 2; bob-white, 44; Am. coot, 12; killdeer, 30; Wilson's snipe, 1; Bonaparte's gull, 1; mourning dove, 9; yellow-shafted flicker, 24;

red-bellied woodpecker, 10; red-headed woodpecker, 5; yellow-bellied sapsucker, 6; hairy woodpecker, 5; downy woodpecker, 21; eastern phoebe, 2; horned lark, 8; blue jay, 21; Am. crow, 44; Carolina chickadee, 48; tufted titmouse, 37; white-breasted nuthatch, 22; brown-headed nuthatch, 21; brown creeper, 5; Carolina wren, 47; mockingbird, 18; brown thrasher, 1; robin, 15; hermit thrush, 8; eastern bluebird, 34; golden-crowned kinglet, 22; ruby-crowned kinglet, 8; cedar waxwing, 11; loggerhead shrike, 1; starling, 38; myrtle warbler, 42; pine warbler, 8; English sparrow, 35; eastern meadowlark, 79; red-wing, 65; rusty blackbird, 3; cardinal, 77; purple finch, 2; pine siskin, 13; Am. goldfinch, 33; eastern towhee, 27; Savannah sparrow, 14; slate-colored junco (Carolina), 151; field sparrow, 49; white-throated sparrow, 300; fox sparrow, 10; swamp sparrow, 9; song sparrow, 117. **Total,** 64 species; 1766 individuals.—David Frey, W. L. Hammett, Joe Jones, Phillips Russell.

138. Charlotte, N. C. (areas essentially the same as last 6 years but without the Clarkson city garden; Johnston and Stillwell ponds along Albemarle road and upper drainage basin of McAlpine Creek included; pine, gum, poplar, and cedar woodland 50%, open farmland 35%, hedgerows 10%, ponds and marshes 5%).—Jan. 1; 7 a.m. to 5:30 p.m. Clear; temp. 28° to 49°; wind 1-7 m.p.h. Eight observers in 3 parties. Total hours, 28½ (15½ in car, 13 on foot); total miles, 65 (40 by car, 25 on foot). Pied-billed grebe, 2; mallard, 1; gadwall, 1; blue-winged teal, 1; ring-necked duck, 2; canvasback, 2; lesser scaup duck, 2; turkey vulture, 2; black vulture, 2; sharp-shinned hawk, 1; red-tailed hawk, 2; sparrow hawk, 1; mourning dove, 5; belted kingfisher, 1; yellow-shafted flicker, 3; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 1; eastern phoebe, 2; blue jay, 20; Am. crow, 17; Carolina chickadee, 3; tufted titmouse, 4; Carolina wren, 2; mockingbird, 2; brown thrasher, 2 robin, 65; hermit thrush, 3; eastern bluebird, 52; golden-crowned kinglet, 2; cedar waxwing, 80; loggerhead shrike, 2; starling, 10; myrtle warbler, 16; English sparrow, 6; eastern meadowlark, 30; cardinal, 16; purple finch, 75; Am. goldfinch, 6; eastern towhee, 11; Savannah sparrow, 15; slate-colored junco, 32; field sparrow, 20; white-throated sparrow, 33; song sparrow, 17. **Total,** 45 species; 574 individuals.—B. R. Chamberlain, Margaret Chamberlain, Norman Chamberlain, Will Hon, Jim Layton, Brem Mayer, Ernest Mitchell, Jr., Charles Sellers (Mecklenburg Audubon Club).

139. Durham, N.C. (Duke University campus as center; northwest 3½ miles to Crystal Lake, west 5 miles to Hollow Rock, northeast 7 miles to Oxford Highway, including Hillandale Golf Course, Duke campus and surrounding forest, bird sanctuary, and lowland along Ellerbee Creek; open land including some pasture and cultivated fields 50%, brush 25%, pine 12 ½%, hardwood 12 ½%).—Dec. 28; 7:30 a.m. to 4:30 p.m. Clear in morning, light clouds in afternoon; temp. 20° to 50°; no wind. Six observers in 2 parties of 3 each. Total hours, 14; total miles, 81 (65 by car, 16 on foot). Hooded merganser, 3; Am. merganser, 1; turkey vulture, 16; black vulture, 2; red-shouldered hawk, 1; killdeer, 33; mourning dove, 103; yellow-shafted flicker, 9; red-headed woodpecker, 1; yellow-bellied sapsucker, 4; hairy woodpecker, 2; downy woodpecker, 8; blue jay, 36; Am. crow, 18; Carolina chickadee, 14; tufted titmouse, 16; white-breasted nuthatch, 6; brown-headed nuthatch, 2; brown creeper, 2; winter wren, 4; Carolina wren, 17; mockingbird, 10; robin, 130; hermit thrush, 4; eastern bluebird, 33; golden-crowned kinglet, 14; ruby-crowned kinglet, 5; cedar waxwing, 100; loggerhead shrike, 1; starling, 62; myrtle warbler, 12; pine warbler, 2; English sparrow, 16; eastern meadowlark, 103; cardinal, 12; purple finch, 19; Am. goldfinch, 33; eastern towhee, 8; Savannah sparrow, 26; slate-colored junco, 300 (est.); field sparrow, 20; white-throated sparrow, 108; fox sparrow, 9; swamp sparrow, 3; song sparrow, 80. **Total,** 45 species; about 1168 individuals.—Dr. and Mrs. Joseph R. Bailey, M. W. Johnson, Paul J. Kramer, Richard Kramer, Barty Martin.

140. Greensboro, N.C. (center of area moved to a point about ½ mile southwest of the transmitting towers of radio station WBIG, thus including Justamere Farm and eliminating Ritter's Lake; otherwise the region remains the same as in past several years, including Pinecroft, Starmount Farm, Hamilton Lakes, Greensboro Country Park, Greensboro-High Point Airport, Lakes Brandt, Richland, Scales, Benjamin, Philadelphia, Buffalo, and Sharpe; also White Oak Pond and Reedy Fork Creek east of Lake Brandt for about 6 miles; the latter is a swamp area not previously covered on counts; deciduous and pine woodland 25%, open fields and golf courses 15%, thickets and brushy fields 15%, marsh 5%, fresh-water lakes and ponds 25%, wooded swamp 5%, city yards, parkways, and campuses 10%).—Dec. 26; 4:15 a.m. to 6 p.m. Clear; temp. 14° to 31°; wind N, 10-15 m.p.h. in morning, less than 5 m.p.h. in afternoon; this was the first hard freeze of the year, so nearly all ponds and lakes were unfrozen; limbs of most trees covered with ice in a.m. from sleet and freezing rain of day before. Nineteen observers in 9 parties. Total hours, 56; total miles, 143 (35 on foot, 108 by car). Horned grebe, 3; pied-billed grebe, 18; great blue heron, 1; mallard, 96 (75±10, 21); black duck, 60; baldpate, 1; wood duck, 1; redhead, 4; ring-necked duck, 32; lesser scaup duck, 6; buffle-head, 2; ruddy duck, 15; Am. merganser, 2; red-breasted merganser, 14; turkey vulture, 28;

black vulture, 1; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 4; bob-white, 41; Am. coot, 125; killdeer, 23; Wilson's snipe, 4; ring-billed gull, 7; mourning dove, 68; barn owl, 1; belted kingfisher, 5; yellow-shafted flicker, 40; pileated woodpecker, 1; red-bellied woodpecker, 15; red-headed woodpecker, 14; yellow-bellied sapsucker, 12; hairy woodpecker, 7; downy woodpecker, 40; eastern phoebe, 13; horned lark, 50 (±10); blue jay, 66; Am. crow, 172; Carolina chickadee, 130; tufted titmouse, 82; white-breasted nuthatch, 13; brown-headed nuthatch, 4; brown creeper, 11; winter wren, 2; Carolina wren, 51; mockingbird, 66; brown thrasher, 6; robin, 91; hermit thrush, 20; eastern bluebird, 226; golden-crowned kinglet, 41; ruby-crowned kinglet, 42; Am. pipit, 62; cedar waxwing, 41; loggerhead shrike, 12; starling, 2065 (est.); myrtle warbler, 49; pine warbler, 54; English sparrow, 137; eastern meadowlark, 129; redwing, 25; rusty blackbird, 52 (H.L.M., G.A.S.); purple grackle, 1; cardinal, 164; purple finch, 14; pine siskin, 22; Am. goldfinch, 349 (280±30, 69); eastern towhee, 78; Savannah sparrow, 1; slate-colored junco, 1387; tree sparrow, 25 (Mr. and Mrs. G.W.P.); field sparrow, 233; white-throated sparrow, 531; fox sparrow, 7; swamp sparrow, 22; song sparrow, 247. **Total,** 79 species; about 7491 individuals.—John Carr, Inex Coldwell, Mrs. F. H. Craft, Larry Crawford, C. R. Lamb, Anne Locke, Mr. and Mrs. H. L. Medford, Hugh Medford, Jr., Oscar H. Paris, Jr., Mr. and Mrs. George W. Perrett, Bill Scarborough, Etta Schiffman, Edith L. Settan, George A. Smith, T. E. Street, Dr. Wesley Taylor, R. L. Dolff (members and guests, Piedmont Bird Club).

141. High Point, N. C. (Uwharrie Scout Camp, High Point Municipal Lake and watershed, portion of High Point, and ponds and farms southeast of city; pine thickets, natural and planted 20%, mixed dry woods 35%, lake and shoreline 20%, wooded swamp 5%, fields 10%, city yards 10%).—Dec. 27; 6 a.m. to 5:30 p.m. Clear; temp. 19° to 40° to 34°; calm; ground bare, small amount of sleet on trees in a.m.; ponds frozen, except wider portions of city lake. Seventeen observers in 2 parties. Total hours, 18; total miles, 40 (15 on foot, 25 by car). Great blue heron, 3; black duck, 31; turkey vulture, 5; sharp-shinned hawk, 1; Cooper's hawk, 3; red-tailed hawk, 1; red-shouldered hawk, 1; sparrow hawk, 2; bob-white, 23; killdeer, 7; mourning dove, 7; horned owl, 2; yellow-shafted flicker, 3; red-bellied woodpecker, 3; yellow-bellied sapsucker, 2; downy woodpecker, 4; eastern phoebe, 1; blue jay, 15; Am. crow, 25; Carolina chickadee, 36; tufted titmouse, 17; white-breasted nuthatch, 4; brown creeper, 1; Carolina wren, 10; mockingbird, 13; brown thrasher, 1; robin, 5; hermit thrush, 3; eastern bluebird, 12; golden-crowned kinglet, 14; ruby-crowned kinglet, 1; cedar waxwing, 199; loggerhead shrike, 4; starling, 22; myrtle warbler, 2; English sparrow 18; brown-headed cowbird, 1; cardinal, 27; purple finch, 4; Am. goldfinch, 85; eastern towhee, 9; Savannah sparrow, 2; slate-colored junco, 135; field sparrow, 6; white-throated sparrow, 26; song sparrow, 9. **Total,** 46 species; 805 individuals. Seen in area Dec. 24: horned grebe, 1; Am. merganser, 1; eastern meadowlark, 14.)—N. R. Callaghan, Mr. and Mrs. J. O. Hauschild, Byron Haworth, Mrs. C. C. Haworth, C. C. Haworth, Jr., Eldora Haworth, Joe Hester, Jean Karnaghan, Mr. and Mrs. J. R. Mattocks, Mrs. C. B. Mattocks, Johnny Miller, Larry Miller, Mickey Miller, Genevieve Moore, Edith Sherrod (Catesby Bird Club).

142. Lenoir, N.C. (center of town to radius of 3 miles; town suburbs 75%, pastures and open farmland 15%, woodland 10%).—Jan. 2; 8 a.m. to 5 p.m. Fair before noon, cloudy in afternoon; temp. 35° to 45°; wind ENE, 8-12 m.p.h.; ground bare. Seventeen observers in 6 parties. Total hours, 9 (on foot); total miles, 10 (on foot). Sparrow hawk, 1; bob-white, 25; mourning dove, 67; screech owl, 1 yellow-shafted flicker, 1; yellow-bellied sapsucker, 3; downy woodpecker, 3; blue jay, 4; Am. crow, 1; Carolina chickadee, 20; tufted titmouse, 17; white-breasted nuthatch, 6; brown creeper, 1; Carolina wren, 14; mockingbird, 3; brown thrasher, 1 (seen daily since Nov. 25—M.T.M.); robin, 7; hermit thrush, 2; eastern bluebird, 6; golden-crowned kinglet, 2; ruby-crowned kinglet, 2; cedar waxwing, 100; starling, 12; myrtle warbler, 50; pine warbler, 2; English sparrow, 150; purple grackle, 1; cardinal, 25; eastern towhee, 7; purple finch, 20; slate-colored junco (Carolina), 41; field sparrow, 1; white-throated sparrow, 70; song sparrow, 22. **Total,** 34 species; 684 individuals.—Miss I. Bernhardt, Mrs. J. B. Bernard, Mr. and Mrs. James Griggs, Mr. and Mrs. R. T. Greer, Mrs. Bess Harper, Margaret Harper, Mr. and Mrs. S. B. Howard, Mr. and Mrs. F. H. May, Mr. and Mrs. Tom Parks, Mr. and Mrs. C. S. Warren, Mrs. R. C. Powell (Lenoir Audubon Club).

143. Mt. Olive, N. C. (Wooten, Williams, and Brandon farms; open fields 50%, pine woods 10%, mixed pine and deciduous woods 35%, small ponds 5%).—Dec. 30; 6:30 a.m. to 5 p.m. Clear; temp. 32° to 48°; wind N, 8-12 m.p.h. in a.m., 19-24 m.p.h. in p.m. Three observers in 2 parties. Total hours, 21; total miles, 33 (15 on foot, 18 by car). Horned grebe, 1 (very recently killed); pied-billed grebe, 5; canvas-back, 1; turkey vulture, 6; black vulture, 17; red-tailed hawk, 3; red-shouldered hawk, 1; marsh hawk, 2; sparrow hawk, 8; bob-white, 7; killdeer, 29; mourning dove, 40; horned owl, 1; barred owl, 1; yellow-shafted flicker, 27;

pileated woodpecker, 1; red-bellied woodpecker, 4; yellow-bellied sapsucker, 13; hairy woodpecker, 2; downy woodpecker, 8; eastern phoebe, 8; blue jay, 12; Am. crow, 22; Carolina chickadee, 47; tufted titmouse, 19; white-breasted nuthatch, 1; brown-headed nuthatch, 2; brown creeper, 1; winter wren, 1; Carolina wren, 15; mockingbird, 30; brown thrasher, 16; robin, 75; hermit thrush, 43; eastern bluebird, 26; golden-crowned kinglet, 7; ruby-crowned kinglet, 34; Am. pipit, 150 (est.); cedar waxwing, 16; loggerhead shrike, 14; starling, 800 (est.); myrtle warbler, 400 (est.); English sparrow, 350 (est.); eastern meadowlark, 48; red-wing, 2752 (2700±200, 52); orchard oriole, 1 (1 collected near same place in winter of 1945 was identified at the Smithsonian; this bird has been present all winter; oriole bill, 2 wing bars, greenish-yellow tail and breast—B.H. III); rusty blackbird, 1; purple grackle, 2; brown-headed cowbird, 10; cardinal, 78; purple finch, 2; pine siskin, 4; Am. goldfinch, 120 (est.); eastern towhee, 64; Savannah sparrow, 24; vesper sparrow, 3; slate-colored junco, 200 (est); chipping sparrow, 15; field sparrow, 74; white-throated sparrow, 130 (est.); fox sparrow, 11; swamp sparrow, 8; song sparrow, 200 (est.) **Total,** 63 species; about 6013 individuals. (Catbird, pine warbler, and blue-headed vireo seen during previous week. Red-headed woodpeckers seem to have made their last appearance in this count area.)—William C. Davis, Bob Holmes II, Bob Holmes III.

144. New Holland, N.C. (same area as in 1940 and subsequent counts; Mattamuskeet National Wildlife Refuge and adjacent woods and fields, including public road across lake; marsh 30%, open water 40%, fields and thickets 20%, pine and cypress woods 10%).—Jan. 2; 7:45 a.m. to 4:15 p.m. Clear to partly overcast; temp, 30° to 47°; wind W; ground bare. Five observers mostly together. Total hours, 8½; total miles, 33 (29 by car; 4 by foot). Common loon, 2; pied-billed grebe, 4; great blue heron, 6; Am. egret, 5; little blue heron, 1; whistling swan, 2000; Canada goose, 20,000; blue goose, 4; mallard, 200; black duck, 400; gadwall, 2; baldpate, 250; pintail, 5000; green-winged teal, 500; shoveller, 11; ring-necked duck, 1; canvas-back, 1; lesser scaup duck, 2; ruddy duck, 1; turkey vulture, 60; black vulture, 23; red-tailed hawk, 1; red-shouldered hawk, 3; bald eagle, 17; marsh hawk, 8; sparrow hawk, 4; bob-white, 8; killdeer, 5; Wilson's snipe, 1; greater yellow-legs, 6; lesser yellow-legs, 1; herring gull, 48; ring-billed gull, 5; mourning dove, 42; belted kingfisher, 2; yellow-shafted flicker, 4; pileated woodpecker, 2; red-bellied woodpecker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 2; downy woodpecker, 2; eastern phoebe, 6; tree swallow, 21; Am. crow, 225; fish crow, 7; Carolina chickadee, 5; Carolina wren, 5; short-billed marsh wren, 1; mockingbird, 13; catbird, 6; brown thrasher, 5; robin, 125; golden-crowned kinglet, 15; Am. pipit, 15; cedar waxwing, 17; starling, 95; myrtle warbler, 1200; Am. goldfinch, 19; English sparrow, 7; eastern meadowlark, 90; red-wing, 4500; purple grackle, 35; brown-headed cowbird, 2; cardinal, 15; eastern towhee, 6; Savannah sparrow, 7; field sparrow, 75; white-throated sparrow, 20; fox sparrow, 2; swamp sparrow, 6; song sparrow, 26. **Total,** 71 species; about 35,207 individuals (larger flocks estimated). (Seen during period: black-bellied plover, 1; Am. merganser, 2; hooded merganser, 1; canvas-back, 1.)—R. L. Wolff, Jimmy Cavenaugh, Billy Gibson, Bobby Anderson, W. G. Cahoon.

145. Pea Island and Oregon Inlet, Dare Co., N.C. (same area as in 1945 and subsequent counts; open water 50%, salt marsh, ponds, and shore 30%, sand dunes mostly covered with high grass and few myrtle bushes 20%).—Dec. 29. Clear to partly overcast; temp. 45° to 65°; wind SW, light. Four observers together. Total hours, 10 (on foot and truck); total miles, 45 (5 on foot, 40 by truck). Common loon, 1; horned grebe, 3; pied-billed grebe, 1; gannet, 150; double-crested cormorant, 1; great blue heron, 7; Louisiana heron, 1; Am. bittern, 1; whistling swan, 28; Canada goose, 10,000; snow goose, 11,500; blue goose, 6; black duck, 125; gadwall, 8; pintail, 200; green-winged teal, 45; shoveller, 45; ring-necked duck, 1; lesser scaup duck, 1; buffle-head, 10; ruddy duck, 3; white-winged scoter, 7; red-breasted merganser, 40; marsh hawk, 3; peregrine falcon, 1; pigeon hawk, 1; bald eagle, 8; Am. coot, 35; piping plover, 5; black-bellied plover, 18; killdeer, 15; greater yellow-legs, 1; lesser yellow-legs, 10; red-backed sandpiper, 3; semi-palmated sandpiper, 125; western sandpiper, 5; sanderling, 30; great black-backed gull, 60; herring gull, 1950; ring-billed gull, 3; Bonaparte's gull, 30; common tern, 1; royal tern, 1; tree swallow, 15; myrtle warbler, 250; eastern meadowlark, 50; red-wing, 5; boat-tailed grackle, 12; purple grackle, 2; Savannah sparrow, 1; seaside sparrow, 3; vesper sparrow, 1; field sparrow, 6; song sparrow, 10; snow bunting, 19 (observed at 75 ft. with 7x50 glasses by entire group). **Total,** 55 species; about 24,866 individuals. (Two additional tern-like birds observed—dark body with brown head with golden tinge; 1 oiled dovekie, picked up on beach of Pea Island on Dec. 27, was killed by cat on Dec. 28.)—Paul Sturm, Tommy Medlin, Brick Grantham, Joe Grantham, R. L. Wolff.

146. Raleigh, N.C. (practically same area as in previous counts; lakes and small ponds 40%, mixed pine and deciduous woodland 15%, deciduous woodland 10%, open fields 10% [total 75%—Ed.]).—Dec. 28; 7:30 a.m. to 5:30 p.m. Clear in a.m., slightly cloudy in p.m.; temp. 28° to 50°; calm; ground bare, water open in center of large

lakes, ice around edges, small ponds ice-covered. Eleven observers in 6 parties. Total hours, 31 (27 on foot, 4 by car); total miles, 35 (27 on foot, 8 by car). Pied-billed grebe, 5; great blue heron, 1; mallard, 50; black duck, 8; redhead, 1; ring-necked duck, 28; lesser scaup duck, 6; ruddy duck, 4; hooded merganser, 4; red-breasted merganser, 3; turkey vulture, 5; sharp-shinned hawk, 1; Cooper's hawk, 3; red-tailed hawk, 3; red-shouldered hawk, 1; sparrow hawk, 2; killdeer, 11; mourning dove, 57; belted kingfisher, 2; yellow-shafted flicker, 18; red-bellied woodpecker, 4; red-headed woodpecker, 8; yellow bellied sapsucker, 3; hairy woodpecker, 4; downy woodpecker, 9; eastern phoebe, 1; blue jay, 76; Am. crow, 32; Carolina chickadee, 32; tufted titmouse, 18; white-breasted nuthatch, 6; brown-headed nuthatch, 7; winter wren, 2; Bewick's wren, 1; Carolina wren, 26; mockingbird, 42; catbird, 1; brown thrasher, 8; robin, 10; hermit thrush, 11; eastern bluebird, 86; golden-crowned kinglet, 10; ruby-crowned kinglet, 4; cedar waxwing, 27; loggerhead shrike, 5; starling, 347; myrtle warbler, 10; pine warbler, 9; English sparrow, 63; eastern meadowlark, 92; cardinal, 53; Am. goldfinch, 50; eastern towhee, 57; Savannah sparrow, 27; vesper sparrow, 3; slate-colored junco, 238; field sparrow, 40; white-throated sparrow, 148; fox sparrow, 7; swamp sparrow, 6; song sparrow, 86. **Total,** 61 species; 1882 individuals. (Bob-white, 12 seen Dec. 27.)—D. L. Wray, E. W. Winkler, J. W. Johnson, Philip Davis, Robt. Overing, C. H. Bostian, Gene, Lee, Lloyd Bostian, Mrs. A. W. Strickland, Ethel Wray.

147. Wilmington District (New Hanover and Brunswick Cos.), N.C. (Wrightsville Beach and Sound, Masonboro and Greenville Sounds, Winter Park, Greenfield Lake, Orton Plantation; mixed pine and deciduous woodland 60%, pasture 5%, fresh-water ponds and river 15%, beach and salt-water marsh 20%).—Dec. 27; 4:30 a.m. to 6 p.m. Clear to partly cloudy; temp. 23° to 47°; wind variable, 4-11 m.p.h.; ground bare; water open. Twenty-one observers in 8 parties. Total hours, 67 (40 on foot, 27 in cars); total miles, 115 (45 on foot, 70 by car). Common loon, 31; red-throated loon, 4; horned grebe, 37; pied-billed grebe, 52; gannet, 35; double-crested cormorant, 36; great blue heron, 19; Am. egret, 4; snowy egret, 5; Louisiana heron, 10; little blue heron, 3; green heron, 1; black-crowned night heron, 52; Canada goose, 473; brant, 1 (seen at close range on beach—B.H.); mallard, 3; black duck, 38; gadwall, 12; baldpate, 123; pintail, 9; green-winged teal, 162; wood duck, 6; ring-necked duck, 56; greater scaup duck, 5 (B.H.); lesser scaup duck, 90; Am. golden-eye, 8; buffle-head, 67; old-squaw, 6; Am. scoter, 32; ruddy duck, 3; hooded merganser, 67; Am. merganser, 9; red-breasted merganser, 427; turkey vulture, 5; red-tailed hawk, 2; red-shouldered hawk, 11; bald eagle, 15; marsh hawk, 8; osprey, 1; sparrow hawk, 9; bob-white, 35; king rail, 2; clapper rail, 3; Florida gallinule, 1; Am. coot, 92; Am. oyster-catcher, 12; piping plover, 4 (B.H.); semipalmated plover, 9; Wilson's plover, 20; killdeer, 34; black-bellied plover, 32; woodcock, 2; Wilson's snipe, 9; willet, 1; greater yellow-legs, 5; lesser yellow-legs, 4; purple sandpiper, 3 (observed at close range on jetty—B.H.; seen several times later in week by E.A. and M.B.); least sandpiper, 1; red-backed sandpiper, 1; dowitcher, 15; semipalmated sandpiper, 5; sanderling, 91; herring gull, 2250 (est.); ring-billed gull, 600 (est.); laughing gull, 30; Bonaparte's gull, 10; Forster's tern, 5; common tern, 4; royal tern, 15; Caspian tern, 7; black tern, 1 (J.F., E.M.); black skimmer, 250 (est); mourning dove, 24; horned owl, 1; belted kingfisher, 16; yellow-shafted flicker, 17; pileated woodpecker, 1; red-bellied woodpecker, 18; red-headed woodpecker, 1; yellow-bellied sapsucker, 5; hairy woodpecker, 2; downy woodpecker, 9; red-cockaded woodpecker, 12 (C.McA.); Arkansas kingbird, 1 (C.A., M.B.); eastern phoebe, 3; tree swallow, 9; blue jay, 196; Am. crow, 52; fish crow, 22; Carolina chickadee, 121; tufted titmouse, 57; red-breasted nuthatch, 7; brown-headed nuthatch, 187; house wren, 8; winter wren, 1; Carolina wren, 42; long-billed marsh wren, 1; short-billed marsh wren, 1; mockingbird, 73; catbird, 11; brown thrasher, 27; robin, 332; hermit thrush, 19; eastern bluebird, 82; blue-gray gnatcatcher, 2; golden-crowned kinglet, 1; ruby-crowned kinglet, 18; Am. pipit, 300 (est.); cedar waxwing, 51; loggerhead shrike, 17; starling, 300 (est.); solitary vireo, 1; myrtle warbler, 266; pine warbler, 18; prairie warbler, 1 (B.H., C.A., M.B.); palm warbler, 1; yellow-throat, 1; English sparrow, 527 (est.); eastern meadowlark, 243; red-wing, 834 (est.); rusty blackbird, 2 (B.H.); boat-tailed grackle, 15; purple grackle, 7; brown-headed cowbird, 86; cardinal 66; purple finch, 34; Am. goldfinch, 86; eastern towhee, 54; Savannah sparrow, 46; sharp-tailed sparrow, 1 (J.T., P.M.); seaside sparrow, 10; vesper sparrow, 27; slate-colored junco, 68; chipping sparrow, 44; field sparrow, 106; white-throated sparrow, 397; fox sparrow, 38; swamp sparrow, 17; song sparrow, 211. **Total,** 139 species; 10,744 individuals. (Seen in area Dec. 26, canvas-back, 2; Dec. 28, brown pelican, 1; black vulture, 1; Jan. 4, 1 ♂ European widgeon among baldpates on Greenfield Lake.—Mrs. Sibbel Turnbull, Mary Urich, Leona Carroll, J. A. Bodine, Ruth Loman, Mrs. Howard Smith, Mrs. Boyd Quarles, Mary Baker, Cecil Appleberry, Polly Mebane, John Trott, John Funderburg, Ernest Mitchell, Claude McAllister, Don McAllister, Maurice Emmart, Steve Smith, Charles Theobald, Bob Holmes, Kenneth Sprunt, Edna Appleberry.

148. Windom, N.C. (farms of L. H. Hutchins, Mack Silver, Mrs. C. P. Gibson, and adjacent ter-

ritory; open farmland 50%, white pine woodland, 2%, pastures 18%, deciduous forests 30%).—Dec. 27; 8 a.m. to dusk. Clear; temp. 10° to 50°; no wind. Three observers in 3 parties. Total hours, 21; total miles, 21 (all on foot). Cooper's hawk, 1; Wilson's snipe, 5; mourning dove, 9; downy woodpecker, 1; blue jay, 21; Am. crow, 131; Carolina chickadee, 5; tufted titmouse, 12; Carolina wren, 14; robin, 1; hermit thrush, 1; eastern bluebird, 12; starling, 6; English sparrow, 196; eastern meadowlark, 14; cardinal, 44; Am. goldfinch, 126; eastern towhee, 15; slate-colored junco, 101; field sparrow, 97; white-throated sparrow, 6; fox sparrow, 3; song sparrow, 148. **Total,** 23 species; 969 individuals.—Roosevelt Hughes, Paul Hughes, James Hutchins.

149. Winston-Salem, N.C. (including city water lake, Reynolda, and lakes and ponds vicinity Yadkin River; pine forest 20%, oak-hickory forest 30%, lakes and ponds 40%, old fields 10%).—Dec. 26; 7 a.m. to 6 p.m. Fair; temp. 10° to 33°; wind negligible. Three observers. Total hours, 28; total miles, 50 (15 on foot, 35 by auto). Pied-billed grebe, 1; great blue heron, 2; Canada goose, 262; mallard, 59; black duck, 34; baldpate, 1; ring-necked duck, 15; lesser scaup duck, 1; turkey vulture, 2; black vulture, 1; red-tailed hawk, 3; sparrow hawk, 1; bob-white, 10; killdeer, 2; mourning dove, 11; barred owl, 1; yellow-shafted flicker, 4; red-bellied woodpecker, 2; red-headed woodpecker, 2; yellow-bellied sapsucker, 7; hairy woodpecker, 1; downy woodpecker, 1; eastern phoebe, 2; blue jay, 47; Am. crow, 139; Carolina chickadee, 58; tufted titmouse, 34; white-breasted nuthatch, 16; Carolina wren, 22; mockingbird, 13; robin, 20; hermit thrush, 1; eastern bluebird, 65; golden-crowned kinglet, 12; ruby-crowned kinglet, 2; cedar waxwing, 30; loggerhead shrike, 1; starling, 116; myrtle warbler, 39; English sparrow, 36; eastern meadowlark, 4; purple grackle, 10; cardinal, 34; purple finch, 15; Am. goldfinch, 28; eastern towhee, 17; slate-colored junco, 475; field sparrow, 120; white-throated sparrow, 86; fox sparrow, 3; song sparrow, 63. **Total,** 51 species, 1931 individuals.—James L. Stephenson, E. Wayne Irvin, Robert H. Witherington.

150. Charleston, S.C. (Bull's Island, adjacent waters and marshes, mainland opposite, back to Wando River, as in preceding years; farmland 20%, fresh-water ponds and wooded swamps 25%, woods, mixed and pine 25%, salt-water creeks, marshes and flats 25%, dunes and ocean front 5%).—Dec. 31; dawn to dusk. Clear; temp. 36° to 50°; wind NW, 10-25 m.p.h. Nineteen observers in 5 parties. Total hours, 31 (13 by car, 16 on foot, 2 on boat); total miles, 103 (24 on foot, 72 by car, 7 on boat). Common loon, 7; horned grebe, 24; pied-billed grebe, 13; brown pelican, 1; gannet, 2; double-crested cormorant, 45; great blue heron, 17; Am. egret, 5; snow egret, 11; Louisiana heron, 10; little blue heron, 14; black-crowned night heron, 4; mallard, 102+; black duck, 215+; gadwall, 71; baldpate, 1; pintail, 42; green-winged teal, 15; blue-winged teal, 18; shoveller, 66; redhead, 5; ring-necked duck, 447; canvas-back, 170; scaup duck (sp.), 134; Am. golden-eye, 2; buffle-head, 81; white-winged scoter, 2; surf scoter, 2; Am. scoter, 29; ruddy duck, 79; hooded merganser, 7; red-breasted merganser, 45; turkey vulture, 47; black vulture, 22; sharp-shinned hawk, 2; Cooper's hawk, 2; red-tailed hawk, 6; red-shouldered hawk, 7; bald eagle, 12; marsh hawk, 20; osprey, 1; peregrine falcon, 2; sparrow hawk, 7; bob-white, 15; turkey, 14; clapper rail, 3; sora, 1; Florida gallinule, 6; Am. coot, 1500+; Am. oyster-catcher, 200+; semi-palmated plover, 5; killdeer, 1; black-bellied plover, 16; ruddy turnstone, 4; Wilson's snipe, 5; spotted sandpiper, 1; willet, 1; lesser yellow-legs, 6; red-backed sandpiper, 20; small sandpiper (sp.), 1; dowitcher, 3; marbled godwit, 100+; sanderling, 18; herring gull, 63; ring-billed gull, 21; laughing gull, 8; Forster's tern, 25; Caspian tern, 2; black skimmer, 1; mourning dove, 32; ground dove, 3; screech owl, 1; horned owl, 1; belted kingfisher, 7; yellow-shafted flicker, 15; pileated woodpecker, 8; red-bellied woodpecker, 21; red-headed woodpecker, 1; yellow-bellied sapsucker, 5; hairy woodpecker, 3; downy woodpecker, 7; red-cockaded woodpecker, 2; eastern phoebe, 12; tree swallow, 3; blue jay, 7; Am. crow, 102+; fish crow, 75+; Carolina chickadee, 49; tufted titmouse, 16; white-breasted nuthatch, 1; brown-headed nuthatch, 6; brown creeper, 3; house wren, 10; Carolina wren, 15; long-billed marsh wren, 2; mockingbird, 14; catbird, 6; brown thrasher, 6; robin, 438+; hermit thrush, 6; eastern bluebird, 30; golden-crowned kinglet, 12; ruby-crowned kinglet, 28; Am. pipit, 97; cedar waxwing, 4; loggerhead shrike, 10; starling, 15; white-eyed vireo, 5; solitary vireo, 3; myrtle warbler, 423+; yellow-throated warbler, 1; pine warbler, 29; yellow-throat, 3; English sparrow, 5; eastern meadowlark, 163; red-wing, 328+; boat-tailed grackle, 1; brown-headed cowbird, 220; cardinal, 38; Am. goldfinch, 109; eastern towhee, 42 (red-eyed, 41; white-eyed, 1); Ipswich sparrow, 3; Savannah sparrow, 33; sharp-tailed sparrow, 2; seaside sparrow, 4; vesper sparrow, 7; slate-colored junco, 23; chipping sparrow, 267; field sparrow, 51; white-throated sparrow, 155; fox sparrow, 13; swamp sparrow, 46; song sparrow, 35. **Total,** 134 species; 6936 individuals. A number of shorebirds were missed due to unfavorable tidal conditions.—Bob Barnett, Louise Barrington, E. Milby Burton, Frances L. Edwards, Robert D. Edwards, Peter Gething, Julian Harrison, Arthur Jenkins, Peter Manigault, M. L. McCrae, E. O. Mellinger, James E. Mosimann, Louis Parker, Jr., George B. Rabb, James Roe, Newton H. Seebeck, Jr., Alexander Sprunt, Jr.,

Alexander Sprunt, IV, Thomas M. Uzzell, Elison A. Williams.

151. Columbia, S.C. (5 miles north of Columbia, Ridgewood Club area and Smith Branch; 7 miles west of Columbia, Hendrix's Pond, Fisher's Pond, Horseshoe Lake, West Columbia to a point 3 miles east of center of town; urban territory 6%, deciduous woods 12%, pine woods 22%, lake shores 21%, broom fields 22%, cattail marsh 3%, reed marsh 9%, cultivated fields 5%).—Dec. 28; 7 a.m. to dusk. Clear to light rain in late afternoon; temp. 32° to 55°; calm. Total miles, 48 (36 by auto, 12 on foot). Pied-billed grebe, 3; ring-necked duck, 14; turkey-vulture, 4; black vulture, 37; Cooper's hawk, 1; red-tailed hawk, 1; marsh hawk, 1; Am. coot, 24; Bonaparte's gull, 10; mourning dove, 33; yellow-shafted flicker, 7; red-bellied woodpecker, 2; red-headed woodpecker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 1; eastern phoebe, 4; blue jay, 28; Am. crow, 13; Carolina chickadee, 5; tufted titmouse, 3; brown-headed nuthatch, 4; brown creeper, 1; winter wren, 3; Carolina wren, 13; mockingbird, 12; catbird, 1; brown thrasher, 11; robin, 42; hermit thrush, 6; eastern bluebird, 41; ruby-crowned kinglet, 19; cedar waxwing, 48; loggerhead shrike, 2; starling, 182; myrtle warbler, 3; pine warbler, 12; English sparrow, 121; eastern meadowlark, 70; purple grackle, 24; brown-headed cowbird, 225; cardinal, 18; Am. goldfinch, 1; eastern towhee, 96; vesper sparrow, 2; slate-colored junco, 34; chipping sparrow, 17; field sparrow, 93; white-throated sparrow, 82; fox sparrow, 3; song sparrow, 20. **Total,** 50 species; 1399 individuals.—Gilbert Bristow, Billy Thomas, Spencer Meeks, Mrs. Kay Sisson, Mrs. P. B. Hendrix, Mrs. W. H. Faver, Mrs. Gerard McNamee.

152. Spartanburg, S.C. (center of town to points 9 miles south and east; Ezell Woods, Ligon estate, Duncan Park, Fairforest meadow, Zimmerman Lake; open farmland 25%, town suburbs 20%, mixed woodland 40%, fresh-water ponds and marshes 15%).—Jan. 2; dawn to dusk. Cloudy in a.m., clearing in p.m.; temp. 34° to 50°; wind NW, 2-4 m.p.h. Nine observers in 2 parties. Total miles, 25 (5 on foot, 20 by car). Pied-billed grebe, 10; mallard, 100; black duck, 30; blue-winged teal, 2; ring-necked duck, 20; ruddy duck, 5; turkey vulture, 1; Cooper's hawk, 1; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 2; Am. coot, 12; killdeer, 20; mourning dove, 8; yellow-shafted flicker, 16; red-headed woodpecker, 1; yellow-bellied sapsucker, 2; downy woodpecker, 3; blue jay, 55; Am. crow, 20; Carolina chickadee, 37; tufted titmouse, 30; red-breasted nuthatch, 2; brown creeper, 1; Carolina wren, 16; mockingbird, 27; brown thrasher, 4; hermit thrush, 4; eastern bluebird, 46; golden-crowned kinglet, 7; ruby-crowned kinglet, 33; Am. pipit, 100+; cedar waxwing, 26; loggerhead shrike, 5; starling, 29; myrtle warbler, 5; pine warbler, 9; English sparrow, 100+; eastern meadowlark, 40; purple grackle, 9; cardinal, 53; purple finch, 9; Am. goldfinch, 100+; eastern towhee, 48; Savannah sparrow, 1; slate-colored junco, 131; chipping sparrow, 6; field sparrow, 130; white-throated sparrow, 64; fox sparrow, 6; song sparrow, 27. **Total,** 51 species; about 1415 individuals.—Gabriel Cannon, Louisa Carlisle, Harold Correll, Ruth Crick, Margaret Hammond, Mr. and Mrs. Arthur Ligon, S. Tucker McCravy, R. E. Rupp.

153. Atlanta, Ga. (Lake Phoebe, Decatur, East Lake, South River, city reservoir, and area between these points; residential 70%, mixed woods 15%, cultivated and abandoned fields 14%, pond and stream 1%).—Dec. 26; 7:30 a.m. to 5:30 p.m. Clear in a.m., broken clouds in p.m.; temp. 22° to 35°, with mean of 28°; wind E, 10-12 m.p.h. Nineteen observers in 8 parties. Total hours, 53; total miles, 84 (34 on foot, 50 by car). Pied-billed grebe, 22; great blue heron, 1; blue-winged teal, 1; Am. golden-eye, 1; buffle-head, 1; turkey vulture, 8; black vulture, 7; red-tailed hawk, 2; red-shouldered hawk, 3; marsh hawk, 1; sparrow hawk, 6; bob-white, 12; Am. coot, 2; killdeer, 57; Wilson's snipe, 3; mourning dove, 98; belted kingfisher, 4; yellow-shafted flicker, 19; pileated woodpecker, 1; red-bellied woodpecker, 5; red-headed woodpecker, 8; yellow-bellied sapsucker, 6; hairy woodpecker, 2; downy woodpecker, 17; eastern phoebe, 5; horned lark, 6; blue jay, 120; Am. crow, 77; Carolina chickadee, 70; tufted titmouse, 56; white-breasted nuthatch, 31; brown-headed nuthatch, 19; brown creeper, 5; winter wren, 4; Bewick's wren, 1; Carolina wren, 41; mockingbird, 49; brown thrasher, 17; robin, 5; hermit thrush, 5; eastern bluebird, 60; golden-crowned kinglet, 61; ruby-crowned kinglet, 32; Am. pipit, 50; cedar waxwing, 12; loggerhead shrike, 2; starling, 713 (600±50, 113); myrtle warbler, 17; pine warbler, 25; English sparrow, 120; eastern meadowlark, 71; red-wing, 51; purple grackle, 6527 (6500±1000, 27); cardinal, 89; purple finch, 31; pine siskin, 3; Am. goldfinch, 96; eastern towhee, 92; Savannah sparrow, 22; vesper sparrow, 6; slate-colored junco, 243; chipping sparrow, 66; field sparrow, 215; white-throated sparrow, 268; fox sparrow, 9; swamp sparrow, 35; song sparrow, 199. **Total,** 67 species; about 9913 individuals.—Ralph Ramsey, Eddie Sams, Glenn Bell, Mrs. J. E. Boyd, Mrs. H. M. Daniel, Norman Giles, Jr., Nelson Spratt, Jr., Henry Robert, Jack Carusos, Richard A. Parks, Ray C. Werner, Ed Collum, Tom Collum, Branch Howe, James Major, Mrs. Lewis Gordon, Mrs. J. M. Smith, Harry Greene, William W. Griffin (Atlanta Bird Club).

154. Brunswick, Ga. (center of town to point 15 miles east; St. Simons and Sea Islands; town suburbs 5%, open beach and sand dunes 35%, salt marsh and mud flats 50%, pineland 3%, grassland 2%, live oak and bay 5%).—Dec. 30; 8 a.m. to 5:30 p.m. Mostly overcast; temp. 36° to 40° to 34°; wind NW to W, 19-24 m.p.h.; rain the night before, unusual cold, and strong winds greatly reduced the numbers of birds seen. Five observers mostly together. Total hours, 14; total miles, 80 (75 by car, 5 on foot). Brown pelican, 1; double-crested cormorant, 5; great blue heron, 1; snowy egret, 1; little blue heron, 4; Am. bittern, 1; scaup duck (sp.), 31; red-breasted merganser, 8; turkey vulture, 2; black vulture, 23; Cooper's hawk, 1; bald eagle, 4; sparrow hawk, 5; Florida gallinule, 2; Am. coot, 15; piping plover, 1; semipalmated plover, 77 (75 est., 2); killdeer, 26; black-bellied plover, 31; ruddy turnstone, 15; Wilson's snipe, 1; red-backed sandpiper, 41; dowitcher, 1; semipalmated sandpiper, 102 (100 est., 2); sanderling, 12; herring gull, 25 (est.); ring-billed gull, 75 (est.); laughing gull, 50 (est.); Bonaparte's gull, 7; Forster's tern, 6; common tern, 8; Caspian tern, 7; black skimmer, 16; mourning dove, 4; ground dove, 4; belted kingfisher, 4; yellow-shafted flicker, 1; yellow-bellied sapsucker, 1; downy woodpecker, 2; eastern phoebe, 2; tree swallow, 152 (150 est., 2); Am. crow, 4; Carolina chickadee, 7; house wren, 2; Carolina wren, 6; long-billed marsh wren, 1; mockingbird, 5; hermit thrush, 4; eastern bluebird, 12; ruby-crowned kinglet, 11; Am. pipit, 47; cedar waxwing, 13; loggerhead shrike, 2; starling, 303 (300 est., 3); black and white warbler, 2; orange-crowned warbler, 2; myrtle warbler, 60; pine warbler, 3; English sparrow, 2; eastern meadowlark, 7; red-wing, 159 (150 est., 9); boat-tailed grackle, 4; cardinal, 11; Am. goldfinch, 3; eastern towhee, 3; Savannah sparrow, 17; sharp-tailed sparrow, 1; vesper sparrow, 1; field sparrow, 3; white-throated sparrow, 56; fox sparrow, 8; swamp sparrow, 5; song sparrow, 9. **Total,** 73 species; about 1548 individuals. (Seen in area Dec. 29: brant, 6 (♀ coll., first state record—G.S.); Am. egret, 1; clapper rail, 1+ (many heard); spotted sandpiper, 1; blue-gray gnatcatcher, 1; yellow-throated warbler, 1; purple grackle, 3.—William W. Griffin, David W. Johnston, Robert Norris, Buddy Robert, George Sciple.

155. Demorest, Ga. (center of town to points 4 miles north, south, and east; town suburbs 10%, deciduous woods 20%, lake shore 35%, open fields 35%).—Dec. 27; 7 a.m. to 5:30 p.m. Cloudy; temp. 18° to 30° to 35°; wind ENE to E, 2-5 m.p.h. Three observers together. Total hours, 10½; total miles, 57 (6 on foot, 51 by car). Pied-billed grebe, 12; lesser scaup duck, 4; Am. golden-eye, 3; hooded merganser, 4; turkey vulture, 3; black vulture, 3; Cooper's hawk, 1; red-tailed hawk, 1; bob-white, 4; killdeer, 1; mourning dove, 272 (175±25, 97); belted kingfisher, 2; pileated woodpecker, 1; red-bellied woodpecker, 2; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 3; eastern phoebe, 1; blue jay, 13; Am. crow, 370 (250±25, 120); Carolina chickadee, 8; tufted titmouse, 9; white-breasted nuthatch, 3; winter wren, 1; Carolina wren, 6; mockingbird, 18; brown thrasher, 1; robin, 1; hermit thrush, 2; eastern bluebird, 24; golden-crowned kinglet, 15; ruby-crowned kinglet, 6; starling, 39; myrtle warbler, 11; pine warbler, 4; palm warbler, 2; English sparrow, 53; eastern meadowlark, 206 (150±10, 56); red-wing, 6; cardinal, 41; purple finch, 3; pine siskin, 3; Am. goldfinch, 47; eastern towhee, 85; Savannah sparrow, 2; slate-colored junco, 175 (est.); field sparrow, 235 (est.); white-throated sparrow, 100 (est.); fox sparrow, 2; swamp sparrow, 21; song sparrow, 34. **Total,** 51 species; about 1592 individuals. (Seen in area Dec. 31: Canada goose, 3; yellow-shafted flicker, 1; cedar waxwing, 35.)—W. W. Griffin, B. Nalls, D. P. Neal.

156. Sherwood and Birdsong Plantations (Grady Co.), Ga. (within 1500 acres; open fields and pastures 50%, pinelands and mixed hardwoods 30%, gum swamp and 6 ponds ranging in size from 1 ½ to 6 acres 20%).—Dec. 25; 6:30 a.m. to 6:30 p.m. (2 hours out at noon). Partly foggy, very warm and cloudy in a.m., dark and cloudy, rapidly falling temperatures in p.m., with showers around noon; temp. 60° to 75° to 50°; wind SSW, 1-10 m.p.h. in a.m.; NW gale, up to 30 m.p.h. as a "cold front" broke. Afternoon observation conditions very bad, accounting for the absence of several common species. Total hours, 10 (on foot); total miles, 12. Pied-billed grebe, 3; water-turkey, 1; great blue heron, 2; pintail, 3; wood duck, 12; ring-necked duck, 43; turkey vulture, 27; black vulture, 24; red-tailed hawk, 2; red-shouldered hawk, 3; marsh hawk, 1; sparrow hawk, 4; bob-white, 14 (1 covey); turkey, 1 (1 18-lb. gobbler killed by hunting party from flock of 7 on the area during period of count); woodcock, 3; Wilson's snipe, 3; mourning dove, 13; barred owl, 3; belted kingfisher, 2; yellow-shafted flicker, 9; pileated woodpecker, 7; red-bellied woodpecker, 11; red-headed woodpecker, 7; yellow-bellied sapsucker, 3; eastern phoebe, 11; blue jay, 10; Am. crow, 31; Carolina chickadee, 9; tufted titmouse, 3; house wren, 5; winter wren, 1; Carolina wren, 13; short-billed marsh wren, 6; mockingbird, 4; catbird, 4; brown thrasher, 8; robin, 1950 (partly est.); hermit thrush, 14; eastern bluebird, 33; ruby-crowned kinglet, 4; cedar waxwing, 125; loggerhead shrike, 2; starling, 25; white-eyed vireo, 1; solitary vireo, 1; myrtle warbler, 110; pine warbler, 96; palm warbler, 13; yellow-throat, 4; eastern meadowlark, 121; red-wing, 242 (partly est.); purple grackle, 2; cardinal, 24; eastern goldfinch, 113; eastern towhee,

32; Savannah sparrow, 2; grasshopper sparrow, 2; vesper sparrow, 63; pine-woods sparrow, 2; slate-colored junco, 3; chipping sparrow, 146 (partly est.); field sparrow, 79 (partly est.); white-throated sparrow, 106; swamp sparrow, 39; song sparrow, 33. **Total,** 65 species; about 3693 individuals. (Seen in area Dec. 21-24: Canada goose 18; brown-headed nuthatch, 2; orange-crowned warbler, 1.)—Herbert L. Stoddard, Sr.

157. Cape Sable Region, Fla. (by roads through Everglades National Park [southwestern Dade Co., southern Monroe Co.] via Paradise Key, West Lake, Coot Bay, and Flamingo to end of passable road west of Flamingo; side trips to coast of Florida Bay at Snakebite and several other points; by foot into several hammocks and over coastal prairie; coastal prairie 30%, beaches and mud flats 30%, mangrove swamp 20%, hammock forests 15%, glades prairie 5%).—Dec. 26; 8 a.m. to 7 p.m. Overcast, visibility fair; temp. 70° to 78°; wind NE, strong. Two observers together. Total miles, 44 (40 by car, 4 on foot). Pied-billed grebe, 13; white pelican, 12; brown pelican, 2; double-crested cormorant, 5; great white heron, 1 (mangroves near West Lake; size, light-colored legs and beak carefully noted); great blue heron, 42; Am. egret, 1050; snowy egret, 52; Louisiana heron, 77; little blue heron, 84; green heron, 2; wood ibis, 330; white ibis, 19; pintail, 300; blue-winged teal, 800; red-breasted merganser, 225; turkey vulture, 86; black vulture, 41; red-shouldered hawk, 11; short-tailed hawk, 1 (black phase, hammock at Paradise Key, seen perched at close range and in flight directly overhead—W.B.R.); bald eagle, 2; marsh hawk, 7; osprey, 3; peregrine falcon, 1; pigeon hawk, 1; sparrow hawk, 9; limpkin, 2; Florida gallinule, 1; Am. coot, 350; killdeer, 6; black-bellied plover, 32; Wilson's snipe, 2; willet, 9; greater yellow-legs, 18; lesser yellow-legs, 150; least and semipalmated sandpiper, 225 (both identified); dowitcher, 175; marbled godwit, 15 (mud flats at Snakebite, observed for 10 minutes at about 100 yds.); herring gull, 1; laughing gull, 56; royal tern, 79; ground dove, 9; belted kingfisher, 32; red-bellied woodpecker, 7; downy woodpecker, 2; eastern phoebe, 5; blue jay, 5; Am. crow, 19; house wren, 1; Carolina wren, 10; mockingbird, 4; catbird, 6; brown thrasher, 1; blue-gray gnatcatcher, 61; loggerhead shrike, 2; palm warbler, 72; yellow-throat, 9; eastern meadowlark, 19; red-wing, 37; boat-tailed grackle, 15; purple grackle, 4; cardinal, 6; Am. goldfinch, 3; Savannah sparrow, 7; song sparrow, 1. **Total,** 66 species; 4634 individuals. Cool, windy weather apparently scattered the large concentrations of herons and ibises seen on prairies and tidal flats west of Flamingo a few days before the census. No heavy evening flight into this area developed on Dec. 26.—William B. Robertson, M. Max Hensley (Univ of Ill.).

158. Cedar Key, Fla. (coast to 4 miles northeast of Sumner; salt marsh, mud flats, mangrove swamp, oak scrub, pine flat-woods, hardwood hammock).—Jan. 2; 9 a.m. to 4:40 p.m. Cloudy; temp. 34° to 55°; wind 1-7 m.p.h.; heavy frost in morning. Three observers together. Total hours, 23 (22½ on foot, ½ by car). Common loon, 5; horned (est.); turkey vulture, 4; black vulture, 2; red-grebe, 4; brown pelican, 23; double-crested cormorant, 37; great blue heron, 12; Am. egret, 35 (est.); snowy egret, 20 (est.); Louisiana heron, 3; little blue heron, 28 (est.); lesser scaup duck, 5986 (est.); ruddy duck, 1; red-breasted merganser, 43 shouldered hawk, 4; bald eagle, 4; marsh hawk, 1; sparrow hawk, 15 (est).; semipalmated plover, 12; killdeer, 16; Wilson's snipe, 1; willet, 1; least sandpiper, 80 (est.); red-backed sandpiper, 31; western sandpiper, 4; herring gull, 78 (est.); ring-billed gull, 8; laughing gull, 28; black skimmer, 2; ground dove, 2; barred owl, 3; belted kingfisher, 21; yellow-shafted flicker, 2; pileated woodpecker, 2; red-bellied woodpecker, 3; downy woodpecker, 3; eastern phoebe, 14; blue jay, 1; crow (sp.), 3; tufted titmouse, 1; brown-headed nuthatch, 1; house wren, 6; long-billed marsh wren, 2; mockingbird, 42 (est.); catbird, 3; robin, 312 (est.); hermit thrush 2; eastern bluebird, 56 (est.); ruby-crowned kinglet, 1; cedar waxwing, 3; loggerhead shrike, 11 (est.); black and white warbler, 1; myrtle warbler, 221 (est.); palm warbler, 11; yellow-throat, 9; English sparrow, 3; eastern meadowlark, 4; red-wing, 2; cardinal, 6; Am. goldfinch, 15; eastern towhee, 21; Savannah sparrow, 12; grasshopper sparrow, 1; sharp-tailed sparrow, 1; seaside sparrow, 5; chipping sparrow, 2; white-throated sparrow, 2; swamp sparrow, 5; song sparrow, 2. **Total,** 69 species; about 7305 individuals.—Pierce Brodkorb, Stephen L. Beckwith, Stephen Fickett (Univ. of Florida).

159. Daytona Beach, Fla. (Peninsula from Zelda Blvd. to Inlet, beach and river roads; mainland west to swamp beyond fire tower on Old Deland Road; from 10th St., Holly Hill to Spruce Creek; pinelands 15%, lagoons and ponds 20%, scrub 15%, fields 22%, town streets 4%, palmetto-deciduous 10%, beach 14%).—Dec. 31; 6:30 a.m. to 5 p.m. Clear; temp. 39° to 53°; wind NW to NE, 8-20 m.p.h. Twenty-two observers in 6 parties. Total hours, 26¾ (17 by car, 9¾ on foot); total miles, 109 (98 by car, 11 on foot). Common loon, 1; horned grebe, 1; pied-billed grebe, 11; brown pelican, 510; gannet, 7; double-crested cormorant, 208; great blue heron, 6; Am. egret, 38; snowy egret, 40; Louisiana heron, 81; little blue heron, 60; green heron, 1; black-crowned night heron, 2; mottled duck, 3; wood duck, 4; lesser scaup duck, 187; red-breasted merganser, 27; turkey vulture, 15; black vulture, 60; sharp-shinned hawk, 1; red-shouldered hawk, 2; bald eagle, 3; marsh hawk, 7; sparrow hawk, 23; Virginia rail, 1 (A.C.

knows it well in the north); Florida gallinule, 1; Am. coot, 10; piping plover, 8; killdeer, 33; black-bellied plover, 12; ruddy turnstone, 58; Wilson's snipe, 1; spotted sandpiper, 3; knot, 8; red-backed sandpiper, 2; sanderling, 185; herring gull, 24; ring billed gull, 509 (250 est., 259); laughing gull, 140; Bonaparte's gull, 1; Forster's tern, 2; royal tern, 1344 (1000 est., 344); Cabot's tern, 1; black skimmer, 126; mourning dove, 73; ground dove, 31; belted kingfisher, 23; yellow-shafted flicker, 8; red-bellied woodpecker, 7; eastern phoebe, 15; tree swallow, 2606 (2000 est., 606); blue jay, 21; scrub jay (Florida), 2; Am. crow, 16; fish crow, 78; Carolina chickadee (Florida), 4; tufted titmouse, 1; house wren, 7; Carolina wren (Florida), 5; long-billed marsh wren, 2; mockingbird, 41; catbird, 11; robin, 1618 (400 est., 1218); eastern bluebird, 70; blue-gray gnatcatcher, 14; ruby-crowned kinglet, 25; loggerhead shrike, 17; white-eyed vireo, 3; black and white warbler, 2; myrtle warbler, 24; pine warbler, 20; palm warbler (western), 119; yellow-throat, 4; English sparrow, 28; eastern meadowlark, 42; red-wing, 74; purple grackle (Florida), 5; brown-headed cowbird, 60; cardinal, 15; Am. goldfinch, 28; eastern towhee, 9; Savannah sparrow, 8; vesper sparrow, 1; chipping sparrow, 7; field sparrow, 1; white-throated sparrow, 2. **Total,** 86 species; about 8914 individuals. (Seen in area Dec. 29; willet, 2; semipalmated sandpiper, 1; brown thrasher, 1; yellow-throated warbler, 3; Jan. 2: osprey, 1; pileated woodpecker, 1; yellow-bellied sapsucker, 1; downy woodpecker, 3; brown-headed nuthatch, 2; prairie warbler, 1; song sparrow, 1.)—Mr. and Mrs. F. B. Rich, Mr. and Mrs. H. F. Kortheuer, Dr. and Mrs. Alexander Cairns, Mrs. F. Booth, Mrs. A. P. Northend, Mrs. E. J. Granville, Mrs. F. C. Little, Mrs. R. P. Block, Mrs. F. Gill, Kenneth Hunter, Billy Jack, Misses E. M. Porter, M. A. Walbran, E. L. Mead, I. E. Warden, C. Roberts, H. Graves, M. T. Rogers, R. S. Ames (Halifax River Bird Club).

160. Fort Pierce, Fla. (city 10%, beach 15%, Indian River 20%, orange groves 35%, pine forest 20%).—Dec. 29; 7:30 a.m. to 5:30 p.m. Cloudy to midafternoon, scattered showers, clear in late afternoon; max. temp. 59°; wind W, 10-25 m.p.h. Total hours, 10 (3 in car, 7 on foot); total miles, 58 (52 in car, 6 on foot). Observers together. Horned grebe, 4; brown pelican, 299; double-crested cormorant (Florida), 102; water-turkey, 3; great blue heron, 22; Am. egret, 6; snowy egret, 1; Louisiana heron, 1; little blue heron, 19; lesser scaup duck, 850 (est.); turkey vulture, 26; black vulture, 45; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 3; bald eagle, 1; marsh hawk, 3; osprey, 6; peregrine falcon, 1; sparrow hawk, 17; bob-white, 11; killdeer, 34; black-bellied plover, 18; ruddy turnstone, 65; spotted sandpiper, 3; red-backed sandpiper, 4; sanderling, 43; herring gull, 28; ring-billed gull, 16; laughing gull, 8; Bonaparte's gull, 15; common tern, 6; least tern, 2; royal tern, 13; mourning dove, 5; ground dove, 7; belted kingfisher, 10; red-bellied woodpecker, 5; yellow-bellied sapsucker, 1; eastern phoebe, 7; tree swallow, 550 (est.); blue jay, 23; house wren, 6; Carolina wren (Florida), 2; mockingbird, 38; catbird, 8; robin, 200 (est.); blue-gray gnatcatcher, 13; ruby-crowned kinglet, 1; cedar waxwing, 86; loggerhead shrike, 11; white-eyed vireo, 1; solitary vireo, 1; myrtle warbler, 23; yellow-throated warbler, 2; pine warbler, 1; palm warbler, 18; yellow-throat, 12; English sparrow, 3; eastern meadowlark, 5; red-wing, 2; cardinal, 16; painted bunting, 4 (reported by Clara Bates from her yard; seen by J.J.M. the day before); Am. goldfinch, 2; eastern towhee, 14; pine-woods sparrow, 6. **Total,** 67 species; about 2761 individuals.—J. J. Murray, Dickson Vardell Murray, James Murray, Jr., Jane Murray Brooks.

161. Jacksonville, Fla. (from Evergreen Cemetery, 2 ¾ miles north from center of town, to Fort George Inlet, on north side of St. Johns River, and from Jacksonville Beach north to St. Johns River jetties, thence south and west 10 miles from Atlantic Beach; suburbs 5%, farmland 5%, deciduous woods 15%, pine flat-woods 15%, coastal scrub 3%, salt marsh 7%, cattail marsh 2%, hardwood swamp 12%, ponds 5%, inlets and creeks 13%, sand dunes 4%, beaches 14%).—Jan. 2; 6:50 a.m. to 6:30 p.m. Fair to slightly cloudy; temp. 33° to 61°; wind WSW to SSE, 4-3 m.p.h. Four observers in 2 parties. Total hours, 23 (approx.); total miles, 75 (approx.). Common loon, 2; pied-billed grebe, 19; brown pelican, 12; double-crested cormorant, 20; great blue heron (Ward's), 12; Am. egret, 10; snowy egret, 6; Louisiana heron, 26; little blue heron, 20; mallard, 2; pintail, 3; blue-winged teal, 13; wood duck, 2; lesser scaup duck, 300; red-breasted merganser, 39; turkey vulture, 22; black vulture, 17; red-tailed hawk, 3; red-shouldered hawk, 2; bald eagle, 2; marsh hawk, 5; sparrow hawk, 20; bob-white, 2; king rail, 3; clapper rail, 9; Virginia rail, 1; sora, 4; Florida gallinule, 6; Am. coot, 56; semipalmated plover, 7; killdeer, 10; black-bellied plover, 4; ruddy turnstone, 16; Wilson's snipe, 4; greater yellow-legs, 1; lesser yellow-legs, 1; least sandpiper, 50; red-backed sandpiper, 100; dowitcher, 28; semipalmated sandpiper, 30; western sandpiper, 10; sanderling, 15; herring gull, 650; ring-billed gull, 500; laughing gull, 265; Bonaparte's gull, 300; Forster's tern, 500; royal tern, 250; Caspian tern, 20; black skimmer, 1500; mourning dove, 2; ground dove, 6; horned owl, 2; belted kingfisher, 19; yellow-shafted flicker, 22; pileated woodpecker, 3; red-bellied woodpecker, 4; yellow-bellied sapsucker, 3; hairy woodpecker, 1; red-cockaded woodpecker, 2; eastern phoebe, 50; tree swallow, 2040; blue jay, 4; scrub jay (Florida), 1;

Am. crow, 2; fish crow, 315; tufted titmouse, 3; white-breasted nuthatch, 1; brown-headed nuthatch, 6; house wren, 20; Carolina wren (Florida), 6; long-billed marsh wren, 7; short-billed marsh wren, 3; mockingbird, 125; catbird, 16; brown thrasher, 11; robin, 430; hermit thrush, 5; eastern bluebird, 70; golden-crowned kinglet, 4; ruby-crowned kinglet, 69; Am. pipit, 50; cedar waxwing, 110; loggerhead shrike, 37; starling, 222; white-eyed vireo, 4; solitary vireo, 1; orange-crowned warbler, 4; myrtle warbler, 1250; yellow-throated warbler, 4; pine warbler, 12; palm warbler (western), 30; yellow-throat, 27; English sparrow, 100; eastern meadowlark, 27; red-wing, 225; rusty blackbird, 1; purple grackle (Florida), 140; cardinal, 55; Am. goldfinch, 175; eastern towhee, 80; Savannah sparrow, 10; vesper sparrow, 12; chipping sparrow, 8; white-throated sparrow, 60; swamp sparrow, 34; song sparrow, 18. **Total,** 107 species; about 10,847 individuals.—S. A. Grimes, Reg. R. McKay, Clifford Pangburn, Henry Kritzler.

162. Key West, Fla. (15-mile area covering Key West and Stock Island).—Dec. 25; 8 a.m. to 4 p.m. Partly cloudy in afternoon; temp. 81° (noon); wind SW, 7 m.p.h. Total hours, 8; mileage, 75% by car, 25% on foot [total mileage not stated—Ed.]. Brown pelican, 17; double-crested cormorant, 15; man-o'-war bird, 7; great white heron, 2; great blue heron, 9 (Ward's 8, Wurdemann's 1); Am. egret, 2; Louisiana heron, 2; green heron, 1; black-crowned night heron, 1; red-breasted merganser, 22; turkey vulture, 7; broad-winged hawk, 3; marsh hawk, 1; osprey, 5; sparrow hawk, 17; Am. coot, 12; semipalmated plover, 1; Wilson's plover, 4; killdeer, 6; black-bellied plover, 17; ruddy turnstone, 2; willet, 4; greater yellow-legs, 1; lesser yellow-legs, 1; knot, 6; least sandpiper, 4; red-backed sandpiper, 10; dowitcher, 38; semipalmated sandpiper, 20; herring gull, 3; ring-billed gull, 5; laughing gull, 200 (est.); royal tern, 46; mourning dove, 3; white-winged dove, 2; ground dove, 1; ruby-throated hummingbird, 6; belted kingfisher, 3; yellow-bellied sapsucker, 1; mockingbird, 9; catbird, 26; white-eyed vireo, 1; myrtle warbler, 8; prairie warbler, 4; palm warbler (western), 32; Am. redstart, 1; redwing, 13; Baltimore oriole, 3; English sparrow, 5; painted bunting, 1; Am. goldfinch, 25 (est.); Savannah sparrow, 3. **Total,** 53 species; 638 individuals.—Margaret and Fred Stearns, Frances Hames (Monroe County Audubon Society).

163. Monroe, Fla. (area same as in 1943, 1945, and 1946; 15 miles on South Loop, 15 miles parallel on main Tamiami Trail; cypress swamp, everglades and canal 100%).—Dec. 30. Rain and low overcast in a.m., showers to partly clear in p.m.; temp. 71° to 76° to 65°; wind, calm to 15 m.p.h. in late p.m. Three observers, separate on foot, together in car. Total hours, 9½ (5 on foot, 4½ in car); total miles, 30 (10 on foot, 20 in car). Pied-billed grebe, 7; double-crested cormorant, 1; water-turkey, 25; great white heron, 1; great blue heron (Ward's), 52; Am. egret, 375; Louisiana heron, 37; little blue heron, 613; green heron, 13; black-crowned night heron, 37; yellow-crowned night heron, 1; Am. bittern, 8; wood ibis, 214; white ibis, 831; lesser scaup duck, 1; turkey vulture, 37; black vulture, 17; red-shouldered hawk, 16; osprey, 4; sparrow hawk, 4; turkey, 2; limpkin, 3; king rail, 1; sora, 1; Florida gallinule, 5; Am. coot, 4; killdeer, 2; mourning dove, 1; horned owl, 1; barred owl, 1; belted kingfisher, 51; yellow-shafted flicker, 2; pileated woodpecker, 3; red-bellied woodpecker, 17; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 2; crested flycatcher, 3; eastern phoebe, 22; tree swallow, 7; blue jay, 2; Am. crow, 25; tufted titmouse, 11; house wren, 12; Carolina wren (Florida), 12; mockingbird, 18; catbird, 11; robin, 1; blue-gray gnatcatcher, 134; ruby-crowned kinglet, 2; loggerhead shrike, 1; white-eyed vireo, 26; solitary vireo, 6; black and white warbler, 12; parula warbler, 3; myrtle warbler, 2; yellow-throated warbler, 1; prairie warbler, 5; palm warbler (western), 111; yellow-throat, 60; eastern meadowlark, 2; red-wing, 207; boat-tailed grackle, 321; purple grackle (Florida), 666; cardinal, 46; swamp sparrow, 5. **Total,** 66 species; 4126 individuals.—Mr. and Mrs. Louis A. Stimson, Robert A. Woodmansee.

164. Opa-Locka, Fla. (edge of Everglades 10 to 20 miles northwest of Miami, 10 to 15 miles inland in northern Dade Co. and southern Broward Co.; roads and canal banks leading out into glades were followed; saw-grass marsh and glades prairie 60%, wet pasture 25%, bay-tree islands and thickets 10%; pine-palmetto flatwoods 5%).—Dec. 25; 7 a.m. to 3 p.m. Clear, visibility good; temp. 80° to 85°; no wind. Three observers together. Total miles, 37½ (35 by car, 2½ on foot). Pied-billed grebe, 7; brown pelican, 9; great blue heron, 27; Am. egret, 41; snowy egret, 34; Louisiana heron, 47; little blue heron, 61; green heron, 3; black-crowned night heron, 190; yellow-crowned night heron, 65; unidentified immature night herons, 50; Am. bittern, 2; wood ibis, 4; white ibis, 58; black duck, 5; blue-winged teal, 3; red-breasted merganser, 6; turkey vulture, 35; black vulture, 80; red-shouldered hawk, 1; bald eagle, 1; marsh hawk, 7; sparrow hawk, 15; sora, 17; purple gallinule, 2 (M.M.H.); Am. coot, 160; killdeer, 88; Wilson's snipe, 41; lesser yellow-legs, 90; laughing gull, 11; mourning dove, 2; ground dove, 1; belted kingfisher, 17; eastern phoebe, 6; tree swallow, 250; rough-winged swallow, 120 (many individuals observed perched on wires and fences at close range; definitely not immature tree swallows); blue jay, 3; house wren, 2; short-billed marsh wren, 13; catbird, 2; robin, 1; blue-gray gnatcatcher, 5; ruby-crowned kinglet, 1;

loggerhead shrike, 12; starling, 1; white-eyed vireo, 2 (D.S., W.B.R.); palm warbler, 86; yellow-throat, 33; English sparrow, 20; eastern meadowlark, 72; red-wing, 485; boat-tailed grackle, 325; purple grackle, 40; cardinal, 7; eastern goldfinch, 65; eastern towhee (white-eyed), 2; swamp sparrow, 29; song sparrow, 1. **Total,** 58 species; 2763 individuals.—Dana Snyder (Univ. of Mich.), William B. Robertson and M. Max Hensley (Univ. of Ill.).

165. Panacea, Fla. (Peninsular Point, Lighthouse Point, Bald Point, Stokley Landing, Sopchoppy, Otter Lake, and intermediate points; Gulf beach 25%, bay shores 10%, salt marsh 5%, fresh-water lakes and ponds 15%, cultivated fields 2%, pine woods 15%, live oak hammocks 15%, residential sections 5%, roadsides 8%).—Dec. 27; 7 a.m. to 6 p.m. Cloudy till 11 a.m., then gradually clearing; temp. (at Tallahassee) 36° to 52°; wind N, 10-20 m.p.h. Five observers in 2 parties in a.m.; 1 party of 2 observers in p.m. Total hours, 14 (13 on foot, 1 in car); total miles, 32 (20 by car, 12 on foot). Common loon, 20; horned grebe, 10; pied-billed grebe, 14; brown pelican, 65; double-crested cormorant, 70; great blue heron, 11; Am. egret, 1; Louisiana heron, 4; little blue heron, 2; Canada goose, 30; pintail, 1; redhead, 3; greater scaup duck, 2; lesser scaup duck, 660 (may include some greater scaups); Am. golden-eye, 16; buffle-head, 1; hooded merganser, 9; red-breasted merganser, 600; turkey vulture, 45; black vulture, 12; red-shouldered hawk, 2; bald eagle, 1; marsh hawk, 1; sparrow hawk, 2; clapper rail, 1; piping plover, 3; semipalmated plover, 3; killdeer, 17; black-bellied plover, 12; ruddy turnstone, 14; Wilson's snipe, 1; least sandpiper, 10; red-backed sandpiper, 50; sanderling, 20; herring gull, 20; ring-billed gull, 85; laughing gull, 16; Forster's tern, 22; royal tern, 65 (may include Caspians); Cabot's tern, 2; mourning dove, 2; ground dove, 7; horned owl, 1; belted kingfisher, 5; yellow-shafted flicker, 3; red-bellied woodpecker, 3; yellow-bellied sapsucker, 2; hairy woodpecker, 1; downy woodpecker, 4; red-cockaded woodpecker, 1; eastern phoebe, 13; tree swallow, 15; blue jay, 10; Am. crow, 9; Carolina chickadee, 5; tufted titmouse, 7; brown-headed nuthatch, 10; house wren, 8; Carolina wren, 7; long-billed marsh wren, 2; mockingbird, 18; catbird, 2; brown thrasher, 5; robin, 90; hermit thrush, 1; eastern bluebird, 26; ruby-crowned kinglet, 12; Am. pipit, 1; loggerhead shrike, 6; solitary vireo, 1; orange-crowned warbler, 2; myrtle warbler, 80; pine warbler, 13; palm warbler, 40 (both races seen); yellow-throat, 20; English sparrow, 10; eastern meadowlark, 6; red-wing, 50; boat-tailed grackle, 30; cardinal, 23; Am. goldfinch, 20; eastern towhee, 30; Savannah sparrow, 6; chipping sparrow, 12; field sparrow, 5; white-throated sparrow, 20; fox sparrow, 1 (large size, red-brown tail, gray head, heavy streaks on underside studied at close range with 6X field glasses—W.C. and party); swamp sparrow, 3; song sparrow, 16. **Total,** 89 species (1 additional subspecies); about 2587 individuals.—William Cross, Bill Ford, Mrs. Thomas Lias, Henry M. Stevenson, Richard West.

166. Paradise Key, Everglades National Park, Fla. (center of key and radiating in various directions but not exceeding 15-mile circle, 7-mile route along highway covered by car, all other observations made on foot; open marsh 50%, scrub cypress 15%, hammock 25%, pine woods 10%).—Jan. 2; 8 a.m. to 5 p.m. Clear; temp. 45° to 73°; wind SE, 3-5 m.p.h.; hammock and pine dry, marsh and cypress wet. Nine observers in 4 parties. Pied-billed grebe, 3; double-crested cormorant (Florida), 1; water-turkey, 44; great white heron, 4; Am. egret, 45; great blue heron (Ward's), 46; snowy egret, 43; Louisiana heron, 76; little blue heron, 208; green heron, 23; black-crowned night heron, 20; yellow-crowned night heron, 1; Am. bittern, 5; wood ibis, 18; white ibis, 142; blue-winged teal, 18; turkey vulture, 93; black vulture, 33; red-tailed hawk, 1; red-shouldered hawk, 17; marsh hawk, 7; osprey, 1; sparrow hawk, 4; limpkin, 16; king rail, 2; sora, 4; purple gallinule, 3; Florida gallinule, 16; Am. coot, 27; killdeer, 14; Wilson's snipe, 1; ground dove, 4; barred owl, 3; ruby-throated hummingbird, 1; belted kingfisher, 37; yellow-shafted flicker, 1; red-bellied woodpecker, 4; downy woodpecker, 2; crested flycatcher, 5; eastern phoebe, 8; tree swallow, 20; blue jay, 5; Am. crow, 9; fish crow, 1; white-breasted nuthatch, 1; house wren, 10; Carolina wren (Florida), 8; mockingbird, 4; catbird, 11; brown thrasher, 4; blue-gray gnatcatcher, 38; ruby-crowned kinglet, 2; loggerhead shrike, 2; white-eyed vireo, 8; parula warbler, 1; myrtle warbler, 1; black-throated green warbler, 3; yellow-throated warbler, 6; palm warbler (western), 68; oven-bird, 1; Louisiana water-thrush, 1; yellow-throat, 47; Am. redstart, 2; eastern meadowlark, 10; red-wing, 29; boat-tailed grackle, 88; purple grackle (Florida), 1; cardinal, 10; Am. goldfinch, 10; eastern towhee (white-eyed), 3; swamp sparrow, 13. **Total,** 71 species; 1418 individuals.—Charles M. Brookfield, Willard E. Dilley, Mr. and Mrs. Edw. F. Hill, Mrs. Frank B. Cox, Mr. and Mrs. William V. Dee, Prof. and Mrs. Arthur I. Taft.

167. Pensacola, Fla. (same territory as for many years; city and suburban areas 10%, open sound and bay and bay shores [largely by car] 25%, scrub oak barrens 2%, mature live oak and deciduous woods 18%, pine woods 17%, fields, pastures, and cut-over woodlands [mostly by car] 16%, fresh-water wooded swamps 2%, fresh-water open ponds 6%, salt marshes 1%, Gulf beach and dunes 3%).—Dec. 26; 6:45 a.m. to 5 p.m. (sunrise to sunset). Clear; wind N by E, 15 m.p.h, diminishing slightly and shifting to E late in day; temp. 34° to 48° to 46°. Ten observers in 3 parties. Total hours,

29½ (13½ by car, 16 on foot); total miles, 122 (107 by car, 15 on foot). Common loon, 15; horned grebe, 23; pied-billed grebe, 6; brown pelican, 29; gannet (rare in the Gulf), 3; double-crested cormorant, 61; great blue heron, 1; green heron (very rare or accidental in winter), 1; scaup duck (sp.), 145; Am. golden-eye, 5; buffle-head, 2; hooded merganser, 2; red-breasted merganser, 70; sharp-shinned hawk, 1; Cooper's hawk, 1; red-shouldered hawk, 2; bald eagle, 3; pigeon hawk (very rare in winter), 1; sparrow hawk, 6; killdeer, 8; black-bellied plover, 7; Wilson's snipe, 5; red-backed sandpiper, 2; sanderling, 10; herring gull, 122; ring-billed gull, 93; laughing gull, 52; Bonaparte's gull, 7; royal tern, 12; mourning dove, 25; white-winged dove (accidental), 1 (bird had been present for 2 weeks, observers compared it in the field with pictures and descriptions, noted short, white-tipped tail, diagonal white band in open wing—F.B., A.C.S., A.F.W., Jr.); belted kingfisher, 8; yellow-shafted flicker, 11; pileated woodpecker, 1; red-bellied woodpecker, 9; red-headed woodpecker, 11; yellow-bellied sapsucker, 3; hairy woodpecker, 1; downy woodpecker, 3; eastern phoebe, 27; blue jay, 41; Am. crow and fish crow (some of each species identified by sound, count made of all seen), 29; Carolina chickadee, 18; tufted titmouse, 32; house wren, 11; Bewick's wren (rare), 2; Carolina wren, 5; mockingbird, 65; catbird (rare in winter), 1; brown thrasher, 6; robin, 750 (700 est., 50); hermit thrush, 2; eastern bluebird, 30; blue-gray gnatcatcher, 6; golden-crowned kinglet, 28; ruby-crowned kinglet, 78; Am. pipit, 13; cedar waxwing, 45; loggerhead shrike, 30; starling, 425 (400 est., 25); white-eyed vireo (rare in winter), 1; solitary vireo, 3; orange-crowned warbler, 5; myrtle warbler, 338; yellow-throated warbler, 2; pine warbler, 93; palm warbler (western and yellow), 41; yellow-throat, 7; English sparrow, 43; eastern meadowlark, 37; red-wing, 6; purple grackle (Florida), 230 (200 est., 30); cardinal, 19; Am. goldfinch, 83; eastern towhee (Alabama), 18; Savannah sparrow, 56; seaside sparrow, 2; vesper sparrow, 8; chipping sparrow, 10; field sparrow, 27; white-throated sparrow, 182; fox sparrow (accidental or very rare), 1 (sparrow shape, large size, general rusty appearance, heavily streaked breast—H.H., C.J.K., E.J.K., L.P.); swamp sparrow, 12; song sparrow, 16. **Total,** 85 species (1 additional subspecies); about 3652 individuals. Several representative and common species, notably turkey vulture and black vulture, could not be found.—**Frank Bray, Lyman E. Goodnight, Howard Horton, Charles J. Kahn, E. J. Koestner, Lennie Pate, Alan C. Sheppard, Maleta M. Wernicke, Francis M. Weston, A. Frederick Wickle, Jr.** (Francis M. Weston Society of Natural History).

168. St. Augustine, Fla. (same territory as in past 2 years, but with better coverage of big cypress swamps; ocean and inlet beaches, flats, salt marshes and bays 40%, woodlands, pine and live oak borders 40%, cypress swamps 10%, pastures, fields, and palmetto scrub 10%).—Dec. 28; dawn to dusk. Clear with brief cloudy intervals in afternoon; temp. 56° to 71° to 64°; wind E, occasionally about 5 m.p.h., but mostly dead calm. Three observers, working separately, 2 all day, 1 in afternoon only. Total hours, 60 (30 on foot, 30 by car); total miles, 145 (15 on foot, 130 by car). Loon (sp.), 2; horned grebe, 8; pied-billed grebe, 18; brown pelican, 800 (est.); gannet, 53; double-crested cormorant, 700 (est.); water-turkey, 1; great blue heron, 68; Am. egret, 142; snowy egret, 187; Louisiana heron, 228; little blue heron, 171; black-crowned night heron, 25; yellow-crowned night heron, 4; wood ibis, 14; black duck, 2; gadwall, 7; pintail, 1; green-winged teal, 1; blue-winged teal, 7; wood duck, 5; ring-necked duck, 16; greater scaup duck, 23; lesser scaup duck, 96; hooded merganser, 14; Am. merganser, 2; red-breasted merganser, 212; turkey vulture, 14; black vulture, 68; Cooper's hawk, 2; red-tailed hawk, 1; red-shouldered hawk, 6; bald eagle, 3; marsh hawk, 6; osprey, 4; peregrine falcon, 1; sparrow hawk, 46; bob-white, 3; clapper rail, 6; Florida gallinule, 1; Am. coot, 135; Am. oyster-catcher, 16; piping plover, 6; semipalmated plover, 76; Wilson's plover, 4; killdeer, 32; black-bellied plover, 227, ruddy turnstone, 142; spotted sandpiper, 2; willet, 8; greater yellow-legs, 2; knot, 6; least sandpiper, 10; red-backed sandpiper, 162; dowitcher, 107; semipalmated sandpiper, 12; western sandpiper, 164; marbled godwit, 1; sanderling, 156; parasitic jaeger, 2 (seen in sunlight with 50X binoculars by observer familiar with the species—H.K.); herring gull, 1000 (est.); ring-billed gull, 1500 (est.); laughing gull, 600 (est.); Bonaparte's gull, 200 (est.); Forster's tern, 400 (est.); common tern, 28; royal tern, 225; Cabot's tern, 1 (species present here for several months); Caspian tern, 6; black skimmer, 4000 (est.); mourning dove, 7; ground dove, 11; barred owl, 1; belted kingfisher, 24; yellow-shafted flicker, 31; pileated woodpecker, 3; red-bellied woodpecker, 8; yellow-bellied sapsucker, 2; hairy woodpecker, 1; downy woodpecker, 4; red-cockaded woodpecker, 2; crested flycatcher, 2; eastern phoebe, 32; tree swallow, 250; blue jay, 16; scrub jay, 4; Am. crow, 12; fish crow, 2; Carolina chickadee, 6; tufted titmouse, 3; white-breasted nuthatch, 1; brown-headed nuthatch, 26; house wren, 12; Carolina wren, 2; mockingbird, 153; catbird, 12; brown thrasher, 2; robin, 150; hermit thrush, 2; eastern bluebird, 246; blue-gray gnatcatcher, 2; golden-crowned kinglet, 1; ruby-crowned kinglet, 26; Am. pipit, 33; loggerhead shrike, 26; starling, 65; white-eyed vireo, 4; solitary vireo, 2; black and white warbler, 3; orange-crowned warbler, 2; parula warbler, 6; myrtle warbler, 5000 (est.); yellow-throated warbler, 2; pine warbler, 61; palm warbler, 125; yellow-throat, 2; English sparrow, 25; eastern meadowlark, 18; red-wing, 115; rusty blackbird, 16; purple grackle, 12; brown-

headed cowbird, 17; cardinal, 26; Am. goldfinch, 46; eastern towhee, 21; Savannah sparrow, 34; seaside sparrow, 2; vesper sparrow, 4; pine-woods sparrow, 2; chipping sparrow, 68; field sparrow, 12; white-throated sparrow, 27; swamp sparrow, 4; song sparrow, 12. **Total,** 134 species; about 19,046 individuals (4658 actual count, 14,200 est.).—Henry Kritzler, Clifford H. Pangburn, William S. Weff.

169. St. Marks, Fla. (same area as in 1947, except for addition of Shell Point and West Goose Creek; circle does not adjoin or overlap that for Panacea, Fla.; bay shores 25%, fresh-water and brackish lakes and ponds 20%, fresh- and salt-water marshes 15%, cypress-gum swamps 2%, cultivated and uncultivated fields 5%, pine woods 8%, deciduous woods 15%, roadsides 10%).—Dec. 30; 6:30 a.m. to 6:15 p.m. Cloudy; temp. (at Tallahassee) 42° to 44°; wind NW, 20-30 m.p.h. Three observers in 2 parties. Total hours, 19 (17 on foot, 2 in car); total miles, 43 (13 on foot, 30 by car). Common loon, 1; horned grebe, 19; pied-billed grebe, 68; brown pelican, 6; double-crested cormorant, 28; water-turkey, 12; great blue heron, 17; Am. egret, 28; snowy egret, 6; Louisiana heron, 5; little blue heron, 16; black-crowned night heron, 1; Canada goose, 2400; blue goose, 7 (W.C.); mallard, 35; black duck, 75; gadwall, 23; baldpate, 175; pintail, 36; green-winged teal, 40; blue-winged teal, 3; shoveller, 12; wood duck, 1; redhead, 120; ring-necked duck, 130; canvas-back, 25; greater scaup duck, 20; lesser scaup duck, 40; unidentified scaups, 350; Am. golden-eye, 2; buffle-head, 11; old-squaw, 3 (males seen in flight and at rest with 10x50 and 7x50 field glasses at 300 yds.—H.S., R.W.); ruddy duck, 20; red-breasted merganser, 90; turkey vulture, 80; black vulture, 18; red-tailed hawk, 2; red-shouldered hawk, 2; bald eagle, 5; marsh hawk, 5; sparrow hawk, 8; clapper rail, 5; sora, 1 (H.S., R.W.); Florida gallinule, 8; Am. coot, 1300; semipalmated plover, 12; killdeer, 13; black-bellied plover, 4; Wilson's snipe, 1; willet, 80; greater yellow-legs, 4; lesser yellow-legs, 1; red-backed sandpiper, 50; western sandpiper, 3; herring gull, 12; ring-billed gull, 36; laughing gull, 3; Forster's tern, 7; mourning dove, 6; belted kingfisher, 15; yellow-shafted flicker, 12; pileated woodpecker, 3; red-bellied woodpecker, 12; yellow-bellied sapsucker, 2; downy woodpecker, 3; red-cockaded woodpecker, 2; eastern phoebe, 12; vermilion flycatcher, 1 (♀ or immature ♂ in same locality where studied by all 3 observers Dec. 22; all identification marks noted and bird compared with nearby phoebe—W.C.); tree swallow, 500; blue jay, 12; Am. crow, 9; unidentified crows, 5; Carolina chickadee, 10; tufted titmouse, 3; brown-headed nuthatch, 10; house wren, 4; winter wren, 1; Carolina wren, 5; long-billed marsh wren, 2; short-billed marsh wren, 2; mockingbird, 18; catbird, 1; robin, 85; hermit thrush, 2; eastern bluebird, 4; blue-gray gnatcatcher, 3; golden-crowned kinglet, 5; ruby-crowned kinglet, 29; Am. pipit, 2; cedar waxwing, 12; loggerhead shrike, 2; starling, 8; white-eyed vireo, 1; solitary vireo, 3; black and white warbler, 2; orange-crowned warbler, 2; myrtle warbler, 70; yellow-throated warbler, 1; pine warbler, 12; palm warbler, 15 (both races seen); yellow-throat, 14; English sparrow, 5; eastern meadowlark, 12; red-wing, 350; rusty blackbird, 10 (H.S.); boat-tailed grackle, 19; purple grackle, 1; cardinal, 43; Am. goldfinch, 7; eastern towhee, 20; Savannah sparrow, 11; sharp-tailed sparrow, 3; seaside sparrow, 3; vesper sparrow, 1; slate-colored junco, 1 (H.S., R.W.); field sparrow, 2; white-throated sparrow, 40; swamp sparrow, 11; song sparrow, 18. **Total,** 117 species (1 additional subspecies); about 6964 individuals. (Seen in area Dec. 22: sharp-shinned hawk, 1; ruddy turnstone, 60; least sandpiper, 6; royal tern, 2; hairy woodpecker, 1; brown thrasher, 1.)—William Cross, Henry M. Stevenson, Richard West.

170. St. Petersburg, Fla. (Gulfport, Pass-a-Grille, Gulf Beaches, Shore Acres, Snell Isle; also inland south of Largo; shore 60%, residential 10%, fields 15%, swamps 5%, woodlands 10%).—Dec. 27. Cloudy till 11 a.m., then sunny and warmer; temp. 53° to 72° (2 p.m.); wind NE, to SE, 10-15 m.p.h., stronger on exposed shores. Twenty-eight observers in 9 parties. Total hours, 75 (28 in car, 47 on foot); total miles, 215 (176 by car, 39 on foot). Common loon, 16; red-throated loon, 2; horned grebe, 14; pied-billed grebe, 23; white pelican, 21; brown pelican, 881; double-crested cormorant, 422; water-turkey, 4, man-o'-war-bird, 2; great blue heron (including Ward's), 108; Am. egret, 165; snowy egret, 104; Louisiana heron, 123; little blue heron, 115; green heron, 2; black-crowned night heron, 2; yellow-crowned night heron, 29; wood ibis, 27; white ibis, 220; pintail, 7; ring-necked duck, 39; lesser scaup duck, 2316; ruddy duck, 7; Am. merganser, 1; red-breasted merganser, 685; turkey vulture, 104; black vulture, 140; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 2; bald eagle, 37; marsh hawk, 7; osprey, 3; sparrow hawk, 57; bob-white, 45; clapper rail, 1; sora, 4; Florida gallinule, 27; Am. coot, 1165; semipalmated plover, 17; Wilson's plover, 38; killdeer, 114; black-bellied plover, 55; ruddy turnstone, 96; spotted sandpiper, 48; willet, 139; knot, 8; least sandpiper, 54; red-backed sandpiper, 33; dowitcher, 1; semipalmated sandpiper, 5; sanderling, 226; herring gull, 408; ring-billed gull, 1380; laughing gull, 294; Forster's tern, 37; royal tern, 300; Cabot's tern, 3; Caspian tern, 2; black skimmer, 432; mourning dove, 280; ground dove, 63; screech owl, 1; belted kingfisher, 72; yellow-shafted flicker, 21; pileated woodpecker, 1; red-bellied woodpecker, 57; red-headed woodpecker, 5; yellow-bellied sapsucker, 3; downy woodpecker, 3; eastern phoebe, 16; tree swallow, 225; blue jay, 67; fish

crow, 15; tufted titmouse, 14; brown-headed nuthatch, 11; house wren, 32; Carolina wren, 1; short-billed marsh wren, 7; mockingbird, 253; catbird, 14; brown thrasher, 1; robin, 2221; eastern bluebird, 72; blue-gray gnatcatcher, 34; ruby-crowned kinglet, 2; Am. pipit, 40; loggerhead shrike, 99; white-eyed vireo, 1; solitary vireo, 1; black and white warbler, 3; myrtle warbler, 437; yellow-throated warbler, 4; pine warbler, 17; prairie warbler, 12; palm warbler (western), 366; yellow-throat, 7; English sparrow, 172; eastern meadowlark, 101; red-wing, 634; boat-tailed grackle, 274; purple grackle (Florida), 75; brown-headed cowbird, 9; cardinal, 29; Am. goldfinch, 689; eastern towhee, 55; Savannah sparrow, 57; sharp-tailed sparrow, 2; chipping sparrow, 6; swamp sparrow, 3; song sparrow, 2. **Total,** 112 species; about 17,210 individuals.—James Farber, Albert R. Fredericks, Jr., Ray Counts, Robin Mills, Mary Lou Mills, Albert Dietrich, Cleora Adams, Enie Kelly, Martha Buchwald, Nellie G. Greene, M. B. Hanrahan, Jack Williams, Ettie Weenink, Marie P. Cobb, C. N. Moore, H. S. Slocum, Louisa Jacob, Anna Greene, Alfred F. Satterthwaite, E. Ann Satterthwaite, William Baxter, Miss Woodworth, Marjorie Quirin, William G. Fargo, Molly Rutherford, Mrs. Chas. Williams, Christie Mason, Daisie Morrison (Boy Scouts, St. Petersburg Audubon Society, Bird and Tree Circle of St. Petersburg Garden Club).

171. Tallahassee, Fla. (points near periphery of circle were Water Oak Plantation, University Dairy, and Lake Lafayette; area about the same as in 1947, except for addition of Water Oak Plantation; open shores of lakes and ponds 20%, wooded shores of lakes and ponds 35%, marshes 1%, cultivated fields 10%, pastures and old fields 5%, pine woods 18%, deciduous woods 8%, residential sections 1%, in boat on lake 2%).—Jan. 1. Clear; temp. 32° to 55°; wind variable (mostly N), 8-12 m.p.h. Five observers, mostly in 2 parties. Total hours, 22½ (22 on foot, ½ in rowboat); total miles, 34 (33 on foot, 1 in rowboat). Horned grebe, 17; pied-billed grebe, 88; double-crested cormorant, 7; water-turkey, 16 (both parties; first midwinter records); great blue heron, 5; Am. egret, 8; snowy egret, 12 (first midwinter record—W.C. and party); Louisiana heron, 5; little blue heron, 6; Canada goose, 300; mallard, 1; black duck, 2; gadwall, 2; baldpate, 40; pintail, 40; green-winged teal, 5; blue-winged teal, 8; shoveller, 4; wood duck, 1; redhead, 1; ring-necked duck, 1050; canvas-back, 25; lesser scaup duck, 11; Am. golden-eye, 6; bufflehead, 18; ruddy duck, 175; turkey vulture, 8; black vulture, 70; sharp-shinned hawk, 2; Cooper's hawk, 1; red-tailed hawk, 7; red-shouldered hawk, 9; bald eagle, 1; marsh hawk, 4; sparrow hawk, 9; bob-white, 5 (killed by hunters); Florida gallinule, 2; Am. coot, 1500; killdeer, 69; Wilson's snipe, 65; spotted sandpiper, 1 (H.S.); greater yellow-legs, 1; lesser yellow-legs, 4; least sandpiper, 7 (W.C. and party); red-backed sandpiper, 4 (W.C. and party); herring gull, 1; ring-billed gull, 5; Forster's tern, 7; common tern, 1; *Sterna* (sp.), 40 (all terns by W.C. and party, although seen by other observers recently); mourning dove, 140; ground dove, 2; horned owl, 2; barred owl, 3; belted kingfisher, 18; yellow-shafted flicker, 27; pileated woodpecker, 4; red-bellied woodpecker, 24; red-headed woodpecker, 5; yellow-bellied sapsucker, 10; hairy woodpecker, 2; downy woodpecker, 7; red-cockaded woodpecker, 3; eastern phoebe, 53; vermilion flycatcher, 3 (females and/or immature males present for over a month; first midwinter records—W.C. and party); tree swallow, 3; blue jay, 46; Am. crow, 57; fish crow, 1; Carolina chickadee, 13; tufted titmouse, 11; white-breasted nuthatch, 5; brown-headed nuthatch, 6; brown creeper, 3; house wren, 28; winter wren, 2; Carolina wren, 40; long-billed marsh wren, 1; short-billed marsh wren, 4; mockingbird, 31; brown thrasher, 18; robin, 50; hermit thrush, 19; eastern bluebird, 40; blue-gray gnatcatcher, 18; golden-crowned kinglet, 6; ruby-crowned kinglet, 81; Am. pipit, 150; cedar waxwing, 15; loggerhead shrike, 18; starling, 340; white-eyed vireo, 1; solitary vireo, 3; black and white warbler, 2; orange-crowned warbler, 8; myrtle warbler, 75; yellow-throated warbler, 6; pine warbler, 45; palm warbler (both races seen), 41; yellow-throat, 28; English sparrow, 20; eastern meadowlark, 26; red-wing, 400; cardinal, 72; purple finch, 3 (H.S.); Am. goldfinch, 95; eastern towhee, 52; Savannah sparrow, 10; grasshopper sparrow, 1 (H.S.); Henslow's sparrow, 1 (first county record; olive-green head, streaked sides and reddish wings studied at close range with 10X glasses—H.S.); vesper sparrow, 32; pine-woods sparrow, 2; slate-colored junco, 6; chipping sparrow, 33; field sparrow, 45; white-throated sparrow, 135; fox sparrow, 3 (first county record—H.S.); swamp sparrow, 47; song sparrow, 29. **Total,** 118 species (1 additional subspecies); about 6206 individuals. (Seen in area recently: Dec. 21, black-crowned night heron, red-breasted merganser, ovenbird; Dec. 24, peregrine falcon, Baltimore oriole, Bonaparte's gull; Dec. 31, purple grackle.)—William Cross, Gene Phipps, Janet Randel, Henry M. Stevenson, Richard West.

172. Ashland, Ohio (Charles Mill Dam area, same area as 1947 count; deciduous woods 25%, waste fields 40%, cultivated fields 5%, marsh and bushy swamps 15%, roadsides 10%, pine plantings 5%).—Jan. 2; 7:45 a.m. to 5 p.m. Partly cloudy, clearing in p.m.; temp. 25° to 35°; wind NW, 10 to 20 m.p.h.; ground frozen; lake frozen except at inlets. Fourteen observers in 4 parties. Total hours, 21½ (on foot); total miles, 29 (on foot). Sharp-shinned hawk, 1; red-shouldered hawk, 1; marsh hawk, 1; bob-white, 35; ring-necked pheasant, 1; Am. coot, 1 (S.M.M.); mourning dove, 6; horned owl, 1;

yellow-shafted flicker, 1; red-bellied woodpecker, 10; red-headed woodpecker, 1; hairy woodpecker, 8; downy woodpecker, 41; blue jay, 28; black-capped chickadee, 37; tufted titmouse, 37; white-breasted nuthatch, 42; red-breasted nuthatch, 2; eastern bluebird, 13; starling, 25; English sparrow, 103 (50 est., 53); cardinal, 55; Am. goldfinch, 207 (40 est., 167); slate-colored junco, 102; tree sparrow, 605 (415 est., 190); swamp sparrow, 1; song sparrow, 76. **Total,** 27 species; about 1451 individuals.—M. R. Newkirk, Charles S. Ross, Paul Thornburg, S. M. Martin, Paul D. Harwood, Wakeman Bell, Robert W. Wolfgang, David Rose, Mrs. David Rose, Jack Guiley, George Preston, Edson Grindle, Robert Arnold, Burton C. Kahl (members and guests, Ashland Naturalists Society).

173. Ashtabula, Ohio (Lake Erie shore from west of Ashtabula to Conneaut (14 miles) and most of lake plain from shore inland 4 miles).—Dec. 30; 7 a.m. to 5 p.m. Rain throughout the night changed at daybreak to shifting snow which nearly covered the ground at dusk; temp. 22° to 30°; wind 5-25 m.p.h.; mostly light clouds; all water unfrozen, streams nearly bank-full. Six observers. Total miles, 142 (99 by car, 43 on foot). Many waterfowl in shelter of near side of breakwaters due to onshore wind, others due to mild weather were too far out in open lake for observation. Horned grebe, 2; double-crested cormorant, 3; mallard, 13; black duck, 61; green-winged teal, 2; redhead, 6; canvas-back, 99; ring-necked duck, 1; scaup duck (sp.), 7; Am. golden-eye, 284; buffle-head, 35; old-squaw, 5; white-winged scoter, 1; ruddy duck, 1; Am. merganser, 294; red-breasted merganer, 5; Cooper's hawk, 2; red-tailed hawk, 1; marsh hawk, 1; sparrow hawk, 1; ruffed grouse, 2; ring-necked pheasant, 1; coot, 1; red-backed sandpiper, 2; great black-backed gull, 1; ring-billed gull, 14; herring gull, 413; Bonaparte's gull, 1330; mourning dove, 4; barred owl, 1; red-bellied woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 9; blue jay, 6; Am. crow, 25; black-capped chickadee, 51; tufted titmouse, 7; white-breasted nuthatch, 3; red-breasted nuthatch, 3; brown creeper, 2; robin, 1; golden-crowned kinglet, 3; starling, 151; English sparrow, 232; cardinal, 49; Savannah sparrow, 1 (first northeastern Ohio winter record; in a well-protected swampy-dune area near beach); slate-colored junco, 31; tree sparrow, 201; song sparrow, 2; snow bunting, 3. **Total,** 50 species; 3375 individuals.—Lawrence E. Hicks, Robert H. Mills, William F. Davis, Ernest O. Limes, Elizabeth Wagner, Milton B. Trautman.

174. Buckeye Lake, Ohio (about the same area as in past 24 years; deciduous woodlands 60%, open farmland 30%, brushy swamp and cattail marsh 10%).—Jan. 2; 7:15 a.m. to 5:15 p.m. Partly cloudy in a.m., clearing in p.m.; temp. 25° to 35°; wind W, 10-20 m.p.h. in a.m. decreasing to 5 m.p.h. or less in p.m.; ground bare; 95% ice coverage on lake, streams mostly ice-covered. Sixteen observers in 4 parties. Total man-miles, 72; total auto miles, 148. Mallard, 325 (est.); black duck, 425 (est.); pintail, 3; green-winged teal, 1; Am. golden-eye, 1; hooded merganser, 1; Am. merganser, 1; Cooper's hawk, 3; red-tailed hawk, 10; red-shouldered hawk, 2; rough-legged hawk, 2; marsh hawk, 4; sparrow hawk, 11; bob-white, 61 (5 coveys); ring-necked pheasant, 10; Am. coot, 2; killdeer, 3; Wilson's snipe, 1; herring gull, 1; mourning dove, 16; barn owl, 1; screech owl, 4; horned owl, 1; barred owl, 4; short-eared owl, 1; yellow-shafted flicker, 42; pileated woodpecker, 5; red-bellied woodpecker, 49; hairy woodpecker, 29; downy woodpecker, 154; horned lark, 77; blue jay, 92; Am. crow, 5; Carolina chickadee, 200; tufted titmouse, 154; white-breasted nuthatch, 141; brown creeper, 30; winter wren, 5; Bewick's wren, 1; Carolina wren, 13; mockingbird, 1; brown thrasher, 1; robin, 3; hermit thrush, 2; eastern bluebird, 46; golden-crowned kinglet, 1; starling, 529; myrtle warbler, 1; English sparrow, 1529; eastern meadowlark, 29; red-wing, 4; rusty blackbird, 2; purple grackle (bronzed), 1; brown-headed cowbird, 4; cardinal, 402; purple finch, 2; Am. goldfinch, 85; eastern towhee, 4; Savannah sparrow, 1; slate-colored junco, 124; Oregon junco, 1 (♂ with red-brown back contrasting sharply with black head, sides pinkish—M.B.T.); tree sparrow, 1051; field sparrow, 2; fox sparrow, 1; swamp sparrow, 10; song sparrow, 249. **Total,** 66 species; about 5976 individuals.—Floyd B. Chapman, Audrey Claugus, Robert Fay, Henry Schuer, Gustav Hall, Lawrence E. Hicks, Robert Z. Kavanagh, Arthur S. Kiefer, Ernst O. Limes, Frank W. Mead, Irvin B. Rickly, Donald Smith, Guyon A. Smith, Milton B. Trautman, Walter A. Tucker, Rowland S. Wilson.

175. Bucyrus, Ohio (Kuehnle and Rexroth farms southeast of city to bridge 4 miles southeast on Mt. Vernon Rd.; open woods 30%, dense woods 40%, bottomland 20%, farmland 10%).—Dec. 27; dawn to dusk. Some overcast early in a.m., sunny in p.m.; temp. 10° to 36° to 30°; wind SSW, 25-38 m.p.h.; ground bare; ponds frozen, but streams with occasional open water. Two observers, working singly. Total hours, 17 (16 on foot, 1 in car); total miles, 44 (20 on foot, 24 in car). Goshawk, 2; red-shouldered hawk, 2; rough-legged hawk, 9; marsh hawk, 4; sparrow hawk, 1; bob-white, 15; mourning dove, 57; screech owl, 1; red-bellied woodpecker, 5; red-headed woodpecker, 7; hairy woodpecker, 4; downy woodpecker, 10; blue jay, 38; black-capped chickadee, 2; tufted titmouse, 41; white-breasted nuthatch, 14; red-breasted nuthatch, 1; brown creeper, 6; Carolina wren, 1; starling, 229; English sparrow, 215; cardinal, 41; Am. goldfinch,

2; slate-colored junco, 18; tree sparrow, 48; swamp sparrow, 2; song sparrow, 6. **Total,** 27 species; 781 individuals.—Chas. H. Kuehnle, Paul F. Kuehnle.

176. Cadiz, Ohio (same area as in past 47 years; yards and gardens in Cadiz and outskirts; brush and weedy fields 25%, woodlands 25%, roadsides 25%, open fields 25%).—Dec. 28; 8:30 a.m. to 1:15 p.m., 2:30 to 5 p.m. Mostly cloudy with few sunny periods; temp. 28° to 40°; wind SW, light; ground bare, frozen. Seven observers, together. Total hours, 7¼ (6 on foot, 1¼ by car); total miles, 21 (5 on foot, 16 by car). Red-tailed hawk, 2; sparrow hawk, 3; ruffed grouse, 1; horned owl, 1; belted kingfisher, 2; yellow-shafted flicker, 1; pileated woodpecker, 1; red-bellied woodpecker, 2; hairy woodpecker, 2; downy woodpecker, 13; horned lark, 14; Am. crow, 3; Carolina chickadee, 35; tufted titmouse, 7; white-breasted nuthatch, 6; Carolina wren, 2; eastern bluebird, 7; starling, 64; Am. goldfinch, 5; English sparrow, 100; cardinal, 11; eastern towhee, 1; slate-colored junco, 41; tree sparrow, 122; song sparrow, 14. **Total,** 25 species; 460 individuals. (Within 3 days after count McArthur found in addition on the Tappan and Piedmont conservation dams near Cadiz, Am. merganser, 12; hooded merganser, 6; horned grebe, 1; black duck, 30; old-squaw, 7; bald eagle, 1.)—Harry B. McConnell, Mr. and Mrs. John G. Worley, John C. Worley, David E. Worley, Clara C. Worley, John Merryman, John McArthur.

177. Canton, Ohio (area 15 miles in diameter with Canton as center; parks and suburbs 30%, woodlots 25%, open farmlands 30%, pastures 15%).—Dec. 26. Mostly clear and bright; temp. 20° to 24°; calm in a.m., wind to 7 m.p.h.; lakes and ponds and most streams frozen, light snow on ground. Thirteen observers in 9 parties. Total hours, 24 (21 on foot, 3 by car); total miles, 40 (30 on foot, 10 by car). Marsh hawk, 1; sparrow hawk, 2; ring-necked pheasant, 7; red-bellied woodpecker, 2; hairy woodpecker, 3; downy woodpecker, 41; blue jay, 7; Am. crow, 18; black-capped chickadee, 32; tufted titmouse, 29; white-breasted nuthatch, 11; brown creeper, 2; starling, 86; English sparrow, 432; eastern meadowlark, 15; cardinal, 52; Am. goldfinch, 3; slate-colored junco, 110; tree sparrow, 129; song sparrow, 34. **Total,** 20 species; 1016 individuals.—Eleanor Anderson, J. G. Biers, Howard Braun, Mrs. John Danner, Mr. and Mrs. J. L. Floyd, C. F. Kaufhaultz, Ernest Kell, Grover Keplinger, Edward Kimes, George Nieport, Mr. and Mrs. D. R. Pratt (Neo Naturalists).

178. Chardon, Ohio (Newbury, Burton, Munson, Claridon, Chardon, and Hampden townships; open fields 55%, thickets 25%, forest 15%, settlements 5%).—Dec. 27; 8:30 a.m. to 5 p.m. Overcast; temp. 20° to 34°; wind SW, 5-20 m.p.h.; ground imperfectly covered with 0-1 in. snow; all water frozen except small areas on more rapid streams. Six observers in 3 parties. Total hours, 22; total miles, 210 (198 by car, 12 on foot). Sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 5; marsh hawk, 1; sparrow hawk, 5; ring-necked pheasant, 1; herring gull, 2; pileated woodpecker, 2; hairy woodpecker, 3; downy woodpecker, 5; blue jay, 4; Am. crow, 3; black-capped chickadee, 59; tufted titmouse, 8; white-breasted nuthatch, 14; brown creeper, 1; golden-crowned kinglet, 4; starling, 70; English sparrow, 197; cardinal, 10; Am. goldfinch, 2; slate-colored junco, 75; tree sparrow, 130; song sparrow, 4. **Total,** 24 species; 608 individuals.—G. F. Ansley, James S. Findley, J. Negus, N. C. Negus, Robert S. Smith, W. B. Quay.

179. Cincinnati, Ohio (southeastern corner of Hamilton Co. and southwestern corner of Clermont Co.; woods and fields in Clermont Co., confluence of Little Miami and Ohio rivers, Remington gravel pits, Ohio River below Twelve Mile Creek; open farmland 30%, deciduous thickets 30%, deciduous woods 20%, river banks 18%, ponds 2%).—Dec. 26; dawn to dusk. Clear; temp. 10° to 27° to 20°; wind S to SE, 2-11 m.p.h.; ground bare and frozen; ponds frozen (hole in one), rivers open and swollen. Twenty-two observers in 4 parties. Total hours, 35 (on foot); total miles, 26 (on foot). Great blue heron, 1; Canada goose, 8; mallard, 87; black duck, 117; pintail, 1; redhead, 2; ring-necked duck, 3; canvas-back, 3; lesser scaup duck, 2; bufflehead, 1; Am. merganser, 9; red-breasted merganser, 1; sharp-shinned hawk, 2; Cooper's hawk, 2; red-tailed hawk, 1; red-shouldered hawk, 2; rough-legged hawk, 1; marsh hawk, 2; sparrow hawk, 11; bob-white, 35 (4 coveys); coot, 11; herring gull, 8; ring-billed gull, 1; mourning dove, 301; barred owl, 1; belted kingfisher, 1; yellow-shafted flicker, 36; red-bellied woodpecker, 32; hairy woodpecker, 11; downy woodpecker, 107; horned lark, 115; blue jay, 32; Am. crow, 10,224 (10,000 est., 224); Carolina chickadee, 303; tufted titmouse, 241; white-breasted nuthatch, 5; brown creeper, 16; winter wren, 1; Carolina wren, 53; mockingbird, 3; catbird, 1; brown thrasher, 1; robin, 42; eastern bluebird, 48; loggerhead shrike (migrant), 1; starling, 545; myrtle warbler, 41; palm warbler, 3; English sparrow, 1200 (est.); eastern meadowlark, 35; cardinal, 343; purple finch, 16; Am. goldfinch, 81; eastern towhee (red-eyed), 10; slate-colored junco, 252; tree sparrow, 221; field sparrow, 5; white-crowned sparrow, 3; white-throated sparrow, 6; song sparrow, 137. **Total,** 60 species; about 14,784 individuals. (Seen in area Dec. 27: old-squaw, 1; hooded merganser, 1; killdeer, 2.)—G. Acomb, G. R. Austing, M. L. Bagel, E. Braunecker, E. Brockschlager, J. R. Bunnell, R. W. Carpenter,

C. W. Chambers, V. Coles, W. Goodpaster, J. Hawksley, O. Hawksley, P. X. Hellman, E. Kemsies, K. H. Maslowski, W. H. Mers, F. R. Neuffer, W. Randle, S. E. Sjodahl, V. C. Sloane, L. Sturm, R. Vaupel.

180. Cleveland, Ohio (Gordon Park eastward to mouth of Chagrin River along Lake Erie shore; inland to Shaker Lakes, Gates Mills, North Chagrin reservation, and Willoughby; lake shore 15%, beech-maple climax forest 20%, open fields 30%, town suburbs 15%, thickets 15%, swamps 5%).—Jan. 2; 8 a.m. to dusk. Clear; temp. 24° to 35°; wind WSW to W, 12-21 m.p.h.; Lake Erie open but ponds and plentiful surface water frozen. Thirty-two observers, 6 singly, others in 11 parties. Total hours, 107; total miles, 392 (101 on foot, 291 by car). Horned grebe, 1; double-crested cormorant, 2; mallard, 3; black duck, 18; redhead, 13; canvas-back, 11; lesser scaup duck, 219; Am. golden-eye, 183; old-squaw, 1; white-winged scoter, 8; ruddy duck, 1; Am. merganser, 142; red-breasted merganser, 30; sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 5; red-shouldered hawk, 1; rough-legged hawk, 7; marsh hawk, 10; sparrow hawk, 5; ruffed grouse, 2; bob-white, 39 (3 coveys); ring-necked pheasant, 4;purple sandpiper, 2 (seen at close range—R.S., J.P.; seen in same area by others the following day); herring gull, 972 (785 est., 187); ring-billed gull, 648 (400 est., 248); Bonaparte's gull, 877 (782 est., 95); mourning dove, 14; screech owl, 1; barred owl, 1; yellow-shafted flicker, 4; pileated woodpecker, 4; red-bellied woodpecker, 3; hairy woodpecker, 15; downy woodpecker, 90; blue jay, 82; Am. crow, 15; black-capped chickadee, 209; tufted titmouse, 42; white-breasted nuthatch, 52; brown creeper, 5; winter wren, 1; robin, 4; golden-crowned kinglet, 2; cedar waxwing, 1; starling, 239; English sparrow, 392; eastern meadowlark, 2; purple grackle, 1; cardinal, 159; pine grosbeak, 2 (pair observed several minutes on cherry tree in Willoughby—R.S., J.P.); pine siskin, 11; Am. goldfinch, 2; slate-colored junco, 335; tree sparrow, 245; white-throated sparrow, 1; swamp sparrow, 1; song sparrow, 33. **Total,** 58 species; about 5177 individuals.—James Akers, Walter Baggaley, L. P. Barbour, B. P. Bole, Jr., John Bole, Harold Cantlin, Vera Carrothers, Ben S. Daniels, Edith Dobbins, C. T. Downer, Adela Gaede, Al Gutta, R. W. Hill, Bill Kasprik, Alice Kingman, Chas. Knight, Rudolph Kula, Ronald Marvin, Don Newman, Margaret Perner, Jerry Piskac, Wm. Scheele, Frank Shankland, Francis Sherwin, Ray Smiley, Ted Stevens, Mildred Stewart, Clark Tefft, Lida Whittier, A. B. Williams, Edythe G. Williams, Marjorie Ramisch (members, Kirtland Bird Club and others).

181. Cuyahoga Falls, Ohio (same area as in former years; city and suburban parks 30%, deciduous woods, valleys, and ravines 20%, open farmland 15%, Summit Lake and Cuyahoga River 20% golf courses 10%, marsh lands 5%).—Jan. 2; 8:30 a.m. to 4:30 p.m. Bright sunshine all day; temp. 22° to 35°; wind W, 15 m.p.h.; Summit Lake and Cuyahoga River open, all other water frozen; ground bare. Fifteen observers in 9 parties. Total hours, 70; total miles, 85 (47 by car, 38 on foot). Pied-billed grebe, 8; black duck, 20; ruddy duck, 1; hooded merganser, 1; red-breasted merganser, 1; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 5; sparrow hawk, 1; bob-white, 10; ring-necked pheasant 2; Am. coot 9; mourning dove 4; screech owl 1; horned owl 1; belted kingfisher, 1; yellow-shafted flicker, 3; pileated woodpecker, 1; hairy woodpecker, 3; downy woodpecker, 33; blue jay, 32; Am. crow, 6; black-capped chickadee, 76; tufted titmouse, 53; white-breasted nuthatch, 37; red-breasted nuthatch, 1; brown creeper, 3; winter wren, 1; cedar waxwing, 1; starling, 170; English sparrow, 324; cardinal, 59; purple finch, 1; Am. goldfinch, 103; eastern towhee, 1; slate-colored junco, 79; tree sparrow, 43; song sparrow, 17. **Total,** 38 species; 1115 individuals.—D. C. Byrer, Ralph Dexter, Stanley Geise, Mrs. E. M. Geise, C. F. Gibbs, John Lieftinck, Florence Liska, Tom McQuade, Gertrude Renneckar, Marie Roetzel, Fred Smith, Martin Smith, Neal Starr, Parker Wilcox, Gale Wiley (Cuyahoga Falls Audubon Club).

182. Dayton, Ohio (Madden Park, Oakwood, Hills and Dales, Miami River, Mad River, Stillwater River, Patterson Field, Wolf Creek, Shiloh, Englewood Dam, Taylorsville Dam, Trotwood, Triangle Park, Huffman Dam, and Island Park; Woodland and thickets 30%, wooded residential and parks 30%, open fields 20%, river banks and dry marsh 20%).—Dec. 26. Clear; temp. 7° to 24°; wind S, average 8.8 m.p.h.; ground hard, bare except some snow in sheltered areas; ice on lakes, floating ice in rivers. Twenty-three observers, 2 singly, others in 6 groups. Total party-hours, 58; total party-miles, 201 (58 on foot, 143 by car). Mallard, 32; black duck, 34; blue-winged teal, 1 (B.S., H.L.); goshawk, 1 (C.O.H.); Cooper's hawk, 3; red-tailed hawk, 1; red-shouldered hawk, 1; rough-legged hawk, 1; marsh hawk, 2; sparrow hawk, 6; bob-white, 96; ring-necked pheasant, 8; Wilson's snipe, 1; herring gull, 7; mourning dove, 124; screech owl, 1; barred owl, 1; belted kingfisher, 3; yellow-shafted flicker, 17; red-bellied woodpecker, 2; yellow-bellied sapsucker, 2; hairy woodpecker, 20; downy woodpecker, 74; horned lark, 10; blue jay, 9; Am. crow, 316; Carolina chickadee, 170; tufted titmouse, 93; white-breasted nuthatch, 11; brown creeper, 3; winter wren, 6; Carolina wren, 9; Bewick's wren, 1; mockingbird, 2; robin, 18; eastern bluebird, 15; golden-crowned kinglet, 3; cedar waxwing, 1; starling, 502; myrtle warbler, 2; English sparrow, 338;

eastern meadowlark, 3; brown-headed cowbird, 1; cardinal, 208; Am. goldfinch, 6; slate-colored junco, 638; tree sparrow, 186; song sparrow, 85. **Total,** 48 species; 3074 individuals.—Jack Lambert, R. J. Lambert, Norman Bright, Catherine Hadeler, Bertram Smith, Helen Lohmier, Glenn Smith, John Shroyer, Frank Laken, Dick Boyer, Don Lee, Charles Breisch, Dorothea Eikenbary, Helen Kirk, Agnes Kirk, Eva Ruhl, Anne Tuhey, Merval Anthony, H. T. Tweedie, C. O. Horst, Paul Knoop, Joe Blincoe, Ben. J. Blincoe (Dayton Audubon Society).

183. Hamilton, Ohio (same area as last year, edge of city to Miami River, to Symnes Creek and back to city; open farmland 40%, wood patches 40%, weedy fields 20%).—Dec. 26; 8:30 a.m. to 4:30 p.m. Clear; temp. 12° to 25°; wind W, light; ground bare; visibility good. Observers together. Total miles, 18 (about 8 on foot, 10 by car). Cooper's hawk, 1; sharp-shinned hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 2; rough-legged hawk, 1; marsh hawk, 2; sparrow hawk, 9; killdeer, 2; mourning dove, 88; barn owl, 2; belted kingfisher, 1; yellow-shafted flicker, 10; downy woodpecker, 16; horned lark, 12; blue jay, 4; Am. crow, 22; Carolina chickadee, 30; tufted titmouse, 26; brown creeper, 3; Carolina wren, 5; mockingbird, 1; robin, 124; eastern bluebird, 4; starling, 3000 (est.); English sparrow, 144; cardinal, 32; Am. goldfinch, 20; slate-colored junco, 110; tree sparrow, 178; white-crowned sparrow, 6; song sparrow, 42. **Total,** 31 species; about 3902 individuals.—Frank Harbaum, Will Harbaum.

184. Lancaster, Ohio (within 5 miles of Lancaster, approximately same route as previous 24 years; stream banks 18%, deciduous woods 61%, pine woods 8%, farmland 13%).—Jan. 2; 8 a.m. to 5:05 p.m. Overcast; temp. 26° to 34° to 30°; wind W to NE, 1-7 m.p.h.; ground frozen, clear; ponds frozen, streams open. Seven observers in 3 parties. Total hours, 40 (on foot); total miles, 51 (on foot). Cooper's hawk, 1; sparrow hawk, 1; bob-white, 22 (2 coveys); mourning dove, 6; belted kingfisher, 1; yellow-shafted flicker, 4; hairy woodpecker, 9; downy woodpecker, 41; blue jay, 15; Carolina chickadee, 34; tufted titmouse, 44; white-breasted nuthatch, 15; brown creeper, 16; Carolina wren, 13; robin, 5; eastern bluebird, 14; ruby-crowned kinglet, 1 (observed at close range with 8X glasses—F.B.); golden-crowned kinglet, 3; starling, 192; English sparrow, 179; cardinal, 106; Am. goldfinch, 17; slate-colored junco, 152; tree sparrow, 47; song sparrow, 64. **Total,** 25 species; 1002 individuals.—Florence Branum, Chas. H. Shaw, Louis Kitz, Edgar Work, Jr., Paul J. Miller, James L. Goslin, Chas. R. Goslin.

185. Oxford, Ohio (Miami University and Western College campuses, Four Mile Creek 2 miles north and 1 mile south of Oxford, 1 mile along Harker's Run and 1 mile along Bull Run above respective junctions with Four Mile Creek, 1½ miles along Indian Creek west-southwest of Oxford, Harold Brown farm, Hueston's Woods; creek and brook margins 45%, mature woodland 20%, open fields 15%, road-sides 10%, campus and urban areas 10%).—Dec. 27; 8 a.m. to 5:30 p.m. Clear; temp. 7° to 30°; wind W. to WSW, 3 m.p.h.; extremely heavy hoar frost all morning; ground bare, frozen; ponds frozen, streams open in center. Eighteen observers in 3 parties. Total party-hours, 23; total party-miles, 20. Pied-billed grebe, 1; mallard, 2; red-tailed hawk, 2; marsh hawk, 1; sparrow hawk, 3; bob-white, 1; rock dove, 83 (all wild); mourning dove, 108; screech owl, 1; barred owl, 2; belted kingfisher, 1; yellow-shafted flicker, 19; red-bellied woodpecker, 27; yellow-bellied sapsucker, 1; hairy woodpecker, 10; downy woodpecker, 51; horned lark, 25; blue jay, 9; Am. crow, 62; Carolina chickadee, 103; tufted titmouse, 83; white-breasted nuthatch, 19; brown creeper, 6; winter wren, 1; Carolina wren, 12; mockingbird, 2; eastern bluebird, 22; golden-crowned kinglet, 4; ruby-crowned kinglet, 1; starling, 75; English sparrow, 697; eastern meadowlark, 1; cardinal, 152; Am. goldfinch, 11; eastern towhee, 5; slate-colored junco, 218; tree sparrow, 125; white-crowned sparrow, 1; song sparrow, 40. **Total,** 39 species; 1987 individuals.—David Barr, Dr. and Mrs. M. W. Boesel, Raymond D. Bourne, Calvin Conrad, James Coyner, Paul Daniel, Barbara Doan, George Fichter, Charles Frie, Carolyn, John and Robert Hefner, Dr. and Mrs. R. A. Hefner, Willard Henning, Charles Lloyd, Norman T. Mattox.

186. Portsmouth, Ohio (same area as in 1947; river and creek banks, edges of cultivated fields and deciduous forests).—Dec. 26; dawn to dusk. Clear; temp. 13° at start; no wind; ground and ponds frozen, streams open. Five observers in 2 groups. Total miles, 105 (85 miles by car, 20 on foot). Mallard, 300 (est.); black duck, 700 (est.); Am. merganser, 2; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 1; bald eagle, 1; sparrow hawk, 20; bob-white, 10; killdeer, 5; mourning dove, 81; belted kingfisher, 1; yellow-shafted flicker, 1; red-bellied woodpecker, 12; hairy woodpecker, 4; downy woodpecker, 27; blue jay, 13; Am. crow, 101; Carolina chickadee, 63; tufted titmouse, 92; white-breasted nuthatch, 12; brown creeper, 1; winter wren, 1; Carolina wren, 13; robin, 7; hermit thrush, 2; eastern bluebird, 6; golden-crowned kinglet, 10; cedar waxwing, 4; starling, 15,000 (est.); myrtle warbler, 2; English sparrow, 125; red-wing, 150; rusty blackbird, 200 (est.); purple grackle, 320 (est.); brown-headed cowbird, 55; cardinal, 304; purple finch, 54; pine siskin, 20; Am. gold-

finch, 107; eastern towhee, 13; slate-colored junco, 254; tree sparrow, 95; field sparrow, 1 (examined at close range with 8X glasses—C.R.); white-throated sparrow, 2; song sparrow, 64. **Total,** 46 species; about 18,260 individuals.—Conrad Roth, Floyd B. Chapman, George R. Barry, Tom. Gallagher, Gusty Hall.

187. Salem, Ohio (along Middle Fork of Little Beaver Creek from New Albany to Coleman's, around Guilford Lake, headwaters of Middle Fork and along Stone Mill Run to Franklin Square; open farm and marshland 25%, wooded valley 75%).—Jan. 1; 7:45 a.m. to 5:15 p.m. Overcast with frequent breaks; visibility 15 miles; temp. 24° to 32° to 31°; wind WNW, 25-38 m.p.h., occasionally decreasing momentarily to 8-12 m.p.h.; ground frozen, ½-in. snow at beginning, mainly bare at end; streams mainly free of ice, marshes and lake frozen. Five observers in 4 parties. Total hours, 33; total miles, 32 (on foot). Cooper's hawk, 4; red-tailed hawk, 5; marsh hawk, 1; sparrow hawk, 6; ring-necked pheasant, 1; Wilson's snipe, 1 (apparently feeding at banks of unfrozen creek—W.C.B.); screech owl, 2; barred owl, 2; belted kingfisher, 1; yellow-shafted flicker, 1; pileated woodpecker, 1; red-bellied woodpecker, 5; hairy woodpecker, 9; downy woodpecker, 43; horned lark, 57; blue jay, 9; Am. crow, 3; black-capped chickadee, 48; Carolina chickadee, 3 (seen and heard at close range by observer familiar with both species—R.O.M.); tufted titmouse, 64; white-breasted nuthatch, 39; brown creeper, 10; winter wren, 4; Carolina wren, 1; golden-crowned kinglet, 7; starling, 71; English sparrow, 256; purple grackle (bronzed), 1; cardinal, 86; pine siskin, 17; Am. goldfinch, 33; eastern towhee, 1; slate-colored junco, 107; tree sparrow, 375; field sparrow, 3; song sparrow, 34. **Total,** 36 species; 1311 individuals.—Mr. and Mrs. Paul A. Stewart, Albert T. Hartley, Raymond O. Marshall, William C. Baker.

188. Steubenville (Jefferson Co.), Ohio (Ohio River along Island Creek road to Richmond, to Jefferson Lake; from Richmond to Townfork Valley to Jefferson State Park, through park area to west of park and vicinity; Wills Creek area from Route 43 to Ohio River, up over hill from Wills Creek to golf-course area, around golf course and through Union Cemetery to Calvary Cemetery to area around Braebarton Audubon trail; deciduous woods 40%, farmland 25%, bottomland 15%, coniferous 5%, swampy brush land 15%).—Dec. 26; 8:30 a.m. to 4:30 p.m. Clear; temp. 6° to 20°; no wind. Eight observers, 3 parties part time. Total hours, 21; total miles, 30. Black duck, 35; lesser scaup duck, 4; Am. merganser, 4; red-tailed hawk, 2; marsh hawk, 1; ruffed grouse, 4; screech owl, 2; belted kingfisher, 2; yellow-shafted flicker, 2; pileated woodpecker, 1; red-bellied woodpecker, 3; hairy woodpecker, 3; downy woodpecker, 31; horned lark, 6; Am. crow, 1; Carolina chickadee, 94; tufted titmouse, 45; white-breasted nuthatch, 7; brown creeper, 1; Carolina wren, 5; hermit thrush, 1; eastern bluebird, 5; golden-crowned kinglet, 2; starling, 588; English sparrow, 228; cardinal, 113; Am. goldfinch, 2; slate-colored junco, 110; tree sparrow, 150; field sparrow, 5; song sparrow, 54. **Total,** 31 species; 1511 individuals.—Albert Tenney, Lois Lee Tenney, Don Rarey, Gail Ash, Dave Patton, Peter Dyke, Richard Banks, Clinton S. Banks.

189. Sugar Grove, Ohio (same locality as last 4 years; about 850 acres in the unglaciated Appalachian plateau; Hocking River and Clear Creek bottoms and adjacent uplands; open bottomlands, 42%, mixed upland woods 19%, hemlock forest 13%, old-field pine scrub 7%, mixed scrub 6%, southern yellow pine woods 5%, village 5%, country estate 3%).—Dec. 26; dawn to 3:30 p.m. Fair, bright sun; temp. 7° to 29°; wind SW, 3-16 m.p.h.; ground bare. Thirty-four observers in 4 groups, these in turn subdividing. Total hours, 117 (on foot); total miles, 106 (on foot). Canada goose, 2; black vulture, 3; Cooper's hawk, 1; sharp-shinned hawk, 2; red-tailed hawk, 3; sparrow hawk, 3; ruffed grouse, 11; bob-white, 23; ring-necked pheasant, 1; mourning dove, 56; screech owl, 3; belted kingfisher, 3; yellow-shafted flicker, 9; pileated woodpecker, 7; red-bellied woodpecker, 15; yellow-bellied sapsucker, 4; hairy woodpecker, 36; downy woodpecker, 101; horned lark, 1; blue jay, 6; Carolina chickadee, 274; tufted titmouse, 277; white-breasted nuthatch, 36; red-breasted nuthatch, 4; brown creeper, 35; winter wren, 17; Carolina wren, 42; hermit thrush, 3; eastern bluebird, 13; golden-crowned kinglet, 71; starling, 110; myrtle warbler, 11; English sparrow, 736; eastern meadowlark, 47; red-wing, 1; brown-headed cowbird, 1; cardinal, 413; purple finch, 12; pine siskin, 4; Am. goldfinch, 193; eastern towhee, 1; slate-colored junco, 469; tree sparrow, 303; field sparrow, 3; white-throated sparrow, 1; swamp sparrow, 1; song sparrow, 147. **Total,** 47 species; 3515 individuals.—Clarence Bateman, A. H. Claugus, C. A. Dambach, Bob Fay, E. E. Good, J. C. Harlor, D. Harlor, L. E. Hicks, S. M. Jepsen, W. K. Jones, A. S. Kiefer, E. Limes, F. Mead, R. H. McCormick, P. J. Miller, H. G. Paul, J. W. Price, R. E. Ramey, C. R. Reese, D. Reese, I. B. Rickly, H. W. Schuer, G. Smith, D. M. Smith, E. S. Thomas, J. S. Thomas, E. Tucker, W. A. Tucker, C. F. Walker, E. T. Walker, W. H. Walker, F. Whitney, R. H. Wilson, J. N. Wolfe (Wheaton Club, members and guests).

190. Toledo, Ohio (4 miles of Swan Creek valley, 5 miles of Ottawa River valley, isolated forests

east of city, edge of Cedar Point Marsh, Maumee River, Acme Power House to Bay, all in Ohio and Erie Marsh, Mich.; last-mentioned area contains a large flowing mineral spring; open water 5%, cultivated fields 5%, cattail marsh 10%, open deciduous forest, 80%).—Dec. 26; dawn to dusk. Clear; temp. 4° at start, 20° at close, max. 26°; wind SW, 0-20 m.p.h.; no snow, Maumee Bay and marshes frozen. Twenty-six observers in 7 parties. Total hours, 38; total miles, 63 (43 on foot, 20 by auto). Mallard, 2724; black duck, 582; baldpate, 3; redhead, 1; lesser scaup duck, 6; Am. golden-eye, 10; buffle-head, 2; ruddy duck, 8; hooded merganser, 5; Am. merganser, 8; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 3; red-shouldered hawk, 4; marsh hawk, 4; sparrow hawk, 3; ring-necked pheasant, 90; Am. coot, 4; great black-backed gull, 2; herring gull, 1610; ring-billed gull, 31; Bonaparte's gull, 2; mourning dove, 101; screech owl, 6; horned owl, 4; barred owl, 3; short-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 4; hairy woodpecker, 2; downy woodpecker, 63; horned lark, 31; blue jay, 52; Am. crow, 3049; black-capped chickadee, 38; tufted titmouse, 39; white-breasted nuthatch, 21; brown creeper, 33; winter wren, 3; Carolina wren, 5; long-billed marsh wren, 1; brown thrasher, 1; golden-crowned kinglet, 5; ruby-crowned kinglet, 1; cedar waxwing, 2; starling, 226; English sparrow, 595; red-wing, 2; cardinal, 168; purple finch, 1; Am. goldfinch, 104; slate-colored junco, 231; tree sparrow, 377; swamp sparrow, 8; song sparrow, 58. **Total.** 55 species; 10,342 individuals.—Lawrence Hiett, Phil Longenecker, Ernest Weaver, Jr., James Nessle, Herbert Berlin, Fred Flickinger, Max Shepherst, Laurel Van Camp, Herbert Dehring, Don Ronau, Harold Mayfield, John Murphy, Joseph Collins, Joseph Collins, Jr., Robert Bergman, Paul Toppin, Lou Klewer, Lou Campbell, Jack Brace, Joe Keller, Seymour Van Gundy, Charles Holloway, James Dehring, Norman Chambers, Bill Shupe, Tom Brindley (Toledo Naturalists' Association).

191. Van Wert, Ohio (same area as previously; open farmland 25%, deciduous swamp forest 75%). —Jan. 2; 8 a.m. to 3:30 p.m. Partly cloudy; temp. 28° to 38°; wind W to SW, 3-7 m.p.h.; ground frozen but no snow; water in ditches and creeks unfrozen. Nine observers in 4 parties. Total hours, 28; total miles, 39. Red-tailed hawk, 3; marsh hawk, 4; mourning dove, 10; yellow-shafted flicker, 10; hairy woodpecker, 8; downy woodpecker, 21; horned lark, 20; blue jay, 7; Am. crow, 41; black-capped chickadee, 2; tufted titmouse, 45; white-breasted nuthatch, 18; brown creeper, 2; Am. pipit, 1 (flushed at close range, white tail feathers seen—H.M.W.); starling, 195; English sparrow, 104; cardinal, 11; slate-colored junco, 11; tree sparrow, 74; field sparrow, 2 (J.R.J.); song sparrow, 25. **Total,** 21 species; 614 individuals.—E. E. Good, Harold M. Walter, Richard F. Good, Richard Good, Jr., J. R. Jarvis, William F. Wydallis, Gerald D. Bowen, George Brooks, Arthur S. Brooks (Upper Maumee Valley Naturalists Club).

192. Youngstown, Ohio (Meander Conservation District south to Yellow Creek; Hamilton, Pine, Beaver, and Evans lakes; essentially same district covered since 1933; open farmland and pasturage 60%, wooded areas 30%, lakes and swamps 10%).—Dec. 26; 7 a.m. to 5:30 p.m. Clear; temp. 4° to 33° to 10°; wind S, light; ground bare; all lakes frozen. Sixteen observers in 7 parties. Total hours, 140 (man-hours); total miles, 55 (afoot). Blue goose, 15; snow goose, 35; Canada goose, 400 (188 counted, balance est.); mallard, 100 (est).; black duck, 500 (est.); baldpate, 10; pintail, 1; Am. golden-eye, 5; sharp-shinned hawk, 1; Cooper's hawk, 3; red-tailed hawk, 1; red-shouldered hawk, 1; rough-legged hawk, 1; marsh hawk, 4; bald eagle, 2 (both white-headed adults); sparrow hawk, 10; bob-white, 27 (2 coveys, several singles); ring-necked pheasant, 8; herring gull, 12; mourning dove, 10; barn owl, 2 (5 others known to be in area); barred owl, 1; horned owl, 1; yellow-shafted flicker, 1; pileated woodpecker, 1; hairy woodpecker, 17; downy woodpecker, 63; red-bellied woodpecker, 6; eastern phoebe, 1 (first winter record, V.P.M., L.G.R., H.O.H., M.H.C.); horned lark, 52 (includes both northern and prairie); blue jay, 101; Am. crow, 1352; black-capped chickadee, 90; tufted titmouse, 49; white-breasted nuthatch, 74; red-breasted nuthatch, 4; brown creeper, 4; winter wren, 1; robin, 1; golden-crowned kinglet, 6; starling, 334; English sparrow, 319; red-wing, 80 (P.S., A.H., R.M.); rusty blackbird, 53 (P.S., A.H., R.M.); brown-headed cowbird, 20; cardinal, 105; Am. goldfinch, 10; eastern towhee, 2; slate-colored junco, 154; tree sparrow, 421; song sparrow, 34; swamp sparrow; 2; snow bunting, 1. **Total,** 53 species; about 4508 individuals. (Seen in area the day before the freeze: hooded merganser, 188; Am. merganser, 12; red-breasted merganser, 2; buffle-head, 12; gadwall, 8; green-winged teal, 2; ring-billed gull, 10. These were frozen out the day before, and all of the recorded ducks were sitting on the ice with the Canada geese. The blue and snow geese, first record, flew over about 3:30 p.m., apparently the last of the heavy flight we had here last November.)—Albert Hartley, Raymond O. Marshall, Paul Stewart, Lyle D. Miller, F. F. Ferris, Bill Berman, H. A. Johnson, Evan Dressel, E. O. Minich, H. O. Heimerdinger, John Barrow, Margaret H. Cook, Cora Turner, Lewis G. Raver, Lindley Vickers, Vincent P. McLaughlin, Jr. (members and guests, Grant M. Cook Bird Club).

193. Athens, W.Va. (in a.m. along secondary road from Athens to Glenlyn, Va., 12 miles distant,

1½ miles down New River [the section of Va. forming a notch in W.Va. between Mercer and Monroe Cos.] 3 miles along U.S. Route 219 past Peterstown, W.Va.; in p.m. 2 miles along lower end of the newly impounded Bluestone Reservoir in southern Summers Co., W.Va.; brushy river and reservoir banks 10%, woods 25%, weed fields 25%, farm and pastureland 40%).—Dec. 28; 7:30 a.m. to 5:30 p.m. Sunny with few clouds in a.m.; increasing clouds in p.m.; temp. 20° at start, 43° at return; calm; ground covered with 4 in. of 5-day-old snow; all ponds frozen, river open, shore ice on reservoir, Total hours, 9; total miles, 38 (33 by car, 5 on foot). Black duck, 16; lesser scaup duck, 1; hooded merganser, 6; black vulture, 2; Cooper's hawk, 1; sparrow hawk, 2; mourning dove, 3; yellow-shafted flicker, 5; downy woodpecker, 1; eastern phoebe, 2; blue jay, 5; Am. crow, 20; Carolina chickadee, 9; tufted titmouse, 11; white-breasted nuthatch, 1; Bewick's wren, 1; Carolina wren, 7; mockingbird, 5; robin, 1; eastern bluebird, 12; loggerhead shrike (migrant), 2; starling, 55; English sparrow, 68; eastern meadowlark, 34; red-wing, 1; cardinal, 26; Am. goldfinch, 9; slate-colored junco, 31; tree sparrow, 15; white-throated sparrow, 19; fox sparrow, 1; song sparrow, 22. **Total,** 32 species; 394 individuals. (Seen in area Dec. 24 to Jan. 2: mallard, 3; ring-necked duck, 12; pileated woodpecker, 1; yellow-bellied sapsucker, 1; winter wren, 1; eastern towhee, 1.)—Clarice and P. C. Bibbee.

194. Charleston, W.Va. (suburbs, Great Kanawha River valley and adjacent hills and valleys from Marmet to Institute, Elk River and vicinity from Big Chimney to Charleston, So. Charleston to Kanawha State Forest; open farmland and grassland 14%, woodland 43%, wooded river-bottom 43%).—Jan. 1; 6 a.m. to 5:30 p.m. Clear to partly cloudy; temp. 22° to 26°; wind SW, 12-15 m.p.h.; 0.1-in. snow on ground; still water frozen. Twenty-five observers in 16 parties. Total hours, 81 (15 at feeders, 61 on foot, 5 by car); total miles, 159 (73 on foot, 86 by car). Mallard, 1; pintail, 1; hooded merganser, 1; red-shouldered hawk, 1; sparrow hawk, 11; ruffed grouse, 4; bob-white, 44; killdeer, 19; rock dove (feral), 65; mourning dove, 30; barn owl, 1; yellow-shafted flicker, 14; red-bellied woodpecker, 1; red-headed woodpecker, 5; yellow-bellied sapsucker, 1; hairy woodpecker, 4; downy woodpecker, 70; eastern phoebe, 1; horned lark, 75; blue jay, 21; Am. crow, 29; Carolina chickadee, 335; tufted titmouse, 181; white-breasted nuthatch, 48; brown creeper, 4; winter wren, 6; Carolina wren, 94; mockingbird, 1; catbird, 1 (C.O.H., Jr.); hermit thrush, 13; eastern bluebird, 16; golden-crowned kinglet, 16; cedar waxwing, 2; starling, 783; myrtle warbler, 2; palm warbler (western), 1; English sparrow, 546; red-wing, 2; brown-headed cowbird, 1; cardinal, 534; Am. goldfinch, 161; purple finch, 6; eastern towhee, 159; lark bunting, 1 (collected on Jan. 3, 1949—W.R.D.); Savannah sparrow, 1; slate-colored junco, 629; tree sparrow, 142; field sparrow, 240; white-throated sparrow, 244; fox sparrow, 21; swamp sparrow, 5; song sparrow, 442. **Total,** 52 species; about 5036 individuals.—R. Wayne Bailey, Sybil Ball, Lucy Barber, Sarah Barber, W. R. DeGarmo, Richard England, A. B. Shields, James E. McCarty, Mr. and Mrs. John W. Handlan, Johnnie Williamson, C. O. Handley, Sr., C. O. Handley, Jr., John M. Handley, Dr. and Mrs. Robert D. Ketchum, Gladys Murrey, William F. Strunk, Mrs. W. W. Trent, Mrs. Ralph Norwood, George Hurley, Mrs. A. C. Clark, R. G. Walsh, Elsie Jones, Ethel Jones, Robert Stephens (Charleston Chapter, Brooks Bird Club).

195. Huntington, W.Va. (same area as in 1940 and subsequent counts; open fields, deciduous woodlands, mixed conifers, river, sanctuary, parks, etc.)—Dec. 26; 6:30 a.m. to 5 p.m. Clear; temp. 5° to 22°; calm; ground bare. Thirty-four observers in 12 parties. Total hours, 73 (68 on foot, 5 by car); total miles, 144 (52 on foot, 92 by car). Canada goose, 6; mallard, 2; black duck, 1; lesser scaup duck, 2; hooded merganser, 9; sharp-shinned hawk, 1; Cooper's hawk, 1; red-shouldered hawk, 1; sparrow hawk, 5; ruffed grouse, 1; bob-white, 1; killdeer, 7; ring-billed gull, 2; mourning dove, 4; barn owl, 1; screech owl, 2; barred owl, 1; yellow-shafted flicker, 14; red-bellied woodpecker, 2; yellow-bellied sapsucker, 4; hairy woodpecker, 13; downy woodpecker, 54; blue jay, 46; Am. crow, 48; Carolina chickadee, 242; tufted titmouse, 179; white-breasted nuthatch, 8; red-breasted nuthatch, 2; brown creeper, 3; winter wren, 2; Carolina wren, 59; mockingbird, 7; robin, 12; hermit thrush, 6; eastern bluebird, 73; golden-crowned kinglet, 7; cedar waxwing, 26; starling, 168; myrtle warbler, 21; pine warbler, 3; English sparrow, 208; eastern meadowlark, 4; red-wing, 107; brown-headed cowbird, 4; cardinal, 341; purple finch, 5; Am. goldfinch, 127; eastern towhee, 82; vesper sparrow, 6; pine-woods sparrow (Bachman's), 2 (observed while singing—J.S.); slate-colored junco, 254; tree sparrow, 91; white-throated sparrow, 86; fox sparrow, 2; swamp sparrow, 13; song sparrow, 134. **Total,** 56 species; 2512 individuals.—N. Bayard Green, John H. Dawson, Kathyrn Crenshaw, Joseph Roberts, Jr., Lois Garrett, Mrs. Walter Kerr, George H. Gunnoe, David Fox, Rachael E. Wilson, Dorothy Fisher, Olive Mortison, Mrs. H. C. Hale, Nell Rose Hale, Mrs. Ira Nowlan, Mrs. William Scringeon, Mrs. Vada McWilliams, James Shires, Larry Garges, Jr., Mrs. C. S. Wagers, Mr. and Mrs. Leo R. Storey, Mrs. H. A. Resener, John Fox, Virginia Cavendish, Mr. and Mrs. W. H. Odell, Mrs. George Long, Mrs. L. C. Alexander, Hugh Land, Howell Land, Mrs. Grady Risen, Georga Martin, Mrs. S. M. Hartley, Ralph M. Edeburn (Huntington Bird Study Club).

196. Morgantown, W.Va. (vicinity Morgantown and Cheat Lake, same general area as in past several years; farmlands, forestlands, and water).—Jan. 2; 7:30 a.m. to 4:30 p.m. Cloudy with brisk wind; temp. 30° at start, slightly higher at mid-day, lower again at finish. Six observers in 2 parties. [Total hours not stated—Ed.]; total miles, 50 (35 by car, 15 on foot). Goose (sp.), 1; black duck, 19; sparrow hawk, 1; bob-white, 1; yellow-shafted flicker, 3; pileated woodpecker, 1; red-bellied woodpecker, 3; hairy woodpecker, 7; downy woodpecker, 11; horned lark, 56; blue jay, 7; Am. crow, 41; chickadee (sp.), 32; tufted titmouse, 71; white-breasted nuthatch, 11; brown creeper, 2; Carolina wren, 10; hermit thrush, 2; eastern bluebird, 3; golden-crowned kinglet, 1; starling, 350; myrtle warbler, 9; English sparrow, 157; eastern meadowlark, 8; cardinal, 68; Am. goldfinch, 1; slate-colored junco, 30; tree sparrow, 13; song sparrow, 59. **Total,** 29 species; 978 individuals.—Herman and Lucretia Bowers, Wayne Davis, William L. Wylie, Robert McCausland, I. B. Boggs.

197. Mt. Lookout (Nicholas Co.), W.Va. (same area as in 1941 and later counts; deciduous and hemlock woodland 74%, pine grove 1%, farmland 25%).—Jan. 2; 7:45 a.m. to 5:15 p.m. Cloudy; temp. 19° to 33°; wind S, 1-7 m.p.h.; ground covered with snow. Two observers, separate in a.m., together most of p.m. Total hours, 14; total miles, 17 (on foot). Ruffed grouse, 2; mourning dove, 2; yellow-shafted flicker, 1; pileated woodpecker, 5; red-bellied woodpecker, 2; hairy woodpecker, 6; downy woodpecker, 16; blue jay, 21; Am. crow, 7; chickadee (sp.), 13; tufted titmouse, 57; white-breasted nuthatch, 9; brown creeper, 1; winter wren, 1; Carolina wren, 3; Bewick's wren, 2; robin, 71; hermit thrush, 14; eastern bluebird, 3; golden-crowned kinglet, 27; cedar waxwing, 75; starling, 6; English sparrow, 118; cardinal, 75; purple finch, 3; pine siskin, 27; Am. goldfinch, 8; eastern towhee, 11; slate-colored junco, 500; tree sparrow, 69; song sparrow, 5. **Total,** 31 species; 1160 individuals.—W. C. Legg, Alton McClung.

198. Wheeling (Ohio Co.), W.Va. city proper; Ohio River, Warwood to Beech Bottom; Middle Wheeling Creek; Big Wheeling Creek, Wheeling Park; West Liberty; Oglebay Park; Ohio County Airport; West Alexander, Pa.; open farmlands and fields 30%, deciduous woods 25%, mixed conifers 5%, brushy roadsides 20%, Big Wheeling and Middle Wheeling creeks 20%).—Jan. 2; 6 a.m. to 6:30 p.m. Morning generally overcast, clear in afternoon; temp. 28° to 34°; wind, 15-20 m.p.h. in morning to almost calm in evening; ground frozen and nearly bare of snow except in sheltered spots; Ohio River open but pools and small lakes completely frozen. Twenty-one observers in 6 groups. Total hours, 35 (18 by car, 17 on foot); total miles, 205 (162 by car, 43 on foot). Sharp-shinned hawk, 1; red-tailed hawk, 1; sparrow hawk, 2; ruffed grouse, 2; ring-necked pheasant, 2; screech owl, 3; horned owl, 3; belted kingfisher, 2; pileated woodpecker, 3; red-bellied woodpecker, 2; yellow-bellied sapsucker, 1; hairy woodpecker, 6; downy woodpecker, 49; horned lark, 40 (northern, 3; prairie, 37); Am. crow, 774+; Carolina chickadee, 157+; tufted titmouse, 117+; white-breasted nuthatch, 13; brown creeper, 2; Bewick's wren, 1; Carolina wren, 23; robin, 2; golden-crowned kinglet, 12; starling, 907+; English sparrow, 670+; eastern meadowlark, 1; rusty blackbird, 1; cardinal, 63+; Am. goldfinch, 14; slate-colored junco, 116+; tree sparrow, 260+; field sparrow, 1; white-throated sparrow, 1; song sparrow, 45+. **Total,** 36 species; 3297+ individuals. (Seen Dec. 24, white-winged crossbill, 2; catbird, 1; Dec. 29, herring gull, 1; Dec. 31, scaup duck [sp.], 3.)—Russell DeGarmo, Karl Haller, Elizabeth Etz, Mr. and Mrs. Wm. Bruhn, Robert McCausland, Wm. Wylie, Pierre Roberts, Carolyn Conrad, Mr. and Mrs. Charles Conrad, Don Bole, Terry Bole, Edna Bowles, George Scheetz, Mr. and Mrs. Thomas Smith, Rosemary Smith, Mr. and Mrs. Orlo Masteller, Billie Brasch (Brooks Bird Club).

199. Bowling Green, Ky. (Schneider, McElroy, and Chaney farms and Sally's Rock; open farmland 25%, woods and thickets 50%, stream banks 25%).—Dec. 26; 6:30 a.m. to 5 p.m. Clear; temp. 10° to 24°; wind NE, 1-7 m.p.h.; all vegetation covered with heavy sleet; still water frozen. Four observers in 2 parties. Total hours, 20 (on foot); total miles, 14. Sharp-shinned hawk, 1; red-tailed hawk, 2; rough-legged hawk, 1; marsh hawk, 1; sparrow hawk, 3; killdeer, 2; mourning dove, 84; barred owl, 1; yellow-shafted flicker, 13; pileated woodpecker, 8; red-bellied woodpecker, 16; yellow-bellied sapsucker, 5; hairy woodpecker, 6; downy woodpecker, 38; eastern phoebe, 1; horned lark, 82; blue jay, 30; Am. crow, 755; Carolina chickadee, 96; tufted titmouse, 41; white-breasted nuthatch, 3; brown creeper, 1; Bewick's wren, 2; Carolina wren, 21; mockingbird, 10; robin, 30; eastern bluebird, 17; loggerhead shrike, 2; starling, 1548; myrtle warbler, 13; English sparrow, 327; red-wing, 1; rusty blackbird, 4; cardinal, 181; purple finch, 34; Am. goldfinch, 108; eastern towhee, 11; slate-colored junco, 255; field sparrow, 79; white-crowned sparrow, 92; white-throated sparrow, 84; fox sparrow, 15; swamp sparrow, 10; song sparrow, 27. **Total,** 44 species; 4061 individuals. (Seen in same area Dec. 20-24: wood duck, Cooper's hawk, red-shouldered hawk, winter wren, hermit thrush, eastern meadowlark, purple grackle.)—L. Y. Lancaster, C. L. Taylor, J. R. Whitmer, Gordon Wilson (Western State College).

200. Kentucky Lake, Ky. (from Egner's Ferry Bridge southward to New Concord and Murray, northward to Kentucky Dam, eastward across the Kentucky National Wildlife Refuge to Cumberland River; fields and field borders 31%, lowland deciduous woods 26%, upland deciduous woods 22%, open water and lake shoreline 20%, urban area 1%).—Jan. 1; 6:15 a.m. to 5:15 p.m. Cloudy; temp. 30° to 35°; wind NW, to SW, under 5 m.p.h. Eleven observers: 2 separate, 4 parties. Total hours, 48 (28 on foot, 11 by auto, 9 in boat); total miles, 222 (30 on foot, 31 by boat, 161 by auto). Horned grebe, 2; double-crested cormorant, 15; great blue heron, 17; Canada goose, 933; snow goose, 1; mallard, 3298; black duck, 1134; baldpate, 50; pintail, 54; ring-necked duck, 1003; canvas-back, 3; lesser scaup duck, 105; Am. golden-eye, 4; buffle-head, 8; old-squaw, 1; hooded merganser, 59; Am. merganser, 48; black vulture, 3; red-tailed hawk, 10; red-shouldered hawk, 6; bald eagle, 6; marsh hawk, 2; sparrow hawk, 12; bob-white, 31; Am. coot, 102; killdeer, 12; woodcock, 1; herring gull, 8; ring-billed gull, 2239; mourning dove, 201; horned owl, 5; barred owl, 2; belted kingfisher, 5; yellow-shafted flicker, 44; pileated woodpecker, 17; red-bellied woodpecker, 19; red-headed woodpecker, 4; yellow-bellied sapsucker, 12; hairy woodpecker, 8; downy woodpecker, 28; horned lark (prairie), 12; blue jay, 168; Am. crow, 111; Carolina chickadee, 197; tufted titmouse, 59; white-breasted nuthatch, 12; brown creeper, 5; Bewick's wren, 1; Carolina wren, 13; mockingbird, 21; brown thrasher, 3; robin, 12; hermit thrush, 2; eastern bluebird, 37; ruby-crowned kinglet, 1; cedar waxwing, 35; loggerhead shrike, 4; starling, 55; English sparrow, 178; eastern meadowlark, 42; rusty blackbird, 150; cardinal, 360; purple finch, 47; Am. goldfinch, 82; eastern towhee, 205; Savannah sparrow, 1; slate-colored junco, 312; tree sparrow, 40; field sparrow, 58; white-crowned sparrow, 15; white-throated sparrow, 79; fox sparrow, 5; swamp sparrow, 10; song sparrow, 51. **Total,** 74 species; about 11,895 individuals. (Seen Dec. 31, Cooper's hawk, 1; Jan. 2, turkey, 2.)—Grace Wyatt, Clarence Calhown, John Morse, Nancy Morse, Eugene Cypert, Tom Butler, L. D. Thompson, Grover Elgan, Talbot Clarke, John Delines, John H. Steenis.

201. Louisville, Ky. (Ohio River from Louisville to Twelve Mile Island and inland about 12 miles to Prospect, Anchorage, and Valley, including Cherokee, Iroquois, Seneca, and Shawnee parks; Ohio River and banks 30%, fields and farmland 25%, brushy fields and new growth 30%, deciduous woodland 15%).—Dec. 26; 5:30 a.m. to 5 p.m. Clear; temp. 6° at start, 24° at return; wind N, 8-12 m.p.h.; ground snow-covered; only large streams and Ohio River open. Twenty-four observers in 8 groups. Total hours afield, 111; total party-miles, 132. Pied-billed grebe, 1; mallard, 107; black duck, 516; baldpate, 1; green-winged teal, 1; wood duck, 1; redhead, 2; ring-necked duck, 1; canvas-back, 2; lesser scaup duck, 60; Am. golden-eye, 68; buffle-head, 7; old-squaw, 4; ruddy duck, 1; hooded merganser, 15; Am. merganser, 7; turkey vulture, 1; black vulture, 24; sharp-shinned hawk, 1; Cooper's hawk, 3; red-tailed hawk, 2; red-shouldered hawk, 3; rough-legged hawk, 1 (D.S.); bald eagle, 1; marsh hawk, 1; sparrow hawk, 13; bob-white, 12; Am. coot, 1 (dead); killdeer, 4; herring gull, 54; ring-billed gull, 48; mourning dove, 48; screech owl, 3; horned owl, 1; barred owl, 4; belted kingfisher, 1; yellow-shafted flicker, 23; pileated woodpecker, 1; red-bellied woodpecker, 19; red-headed woodpecker, 1; yellow-bellied sapsucker, 2; hairy woodpecker, 12; downy woodpecker, 32; horned lark, 34; blue jay, 38; Am. crow, 499; Carolina chickadee, 101; tufted titmouse, 80; white-breasted nuthatch, 18; red-breasted nuthatch, 2; brown creeper, 2; winter wren, 6; Bewick's wren, 1 (W.H.S., C.C.C.); Carolina wren, 28; mockingbird, 37; eastern bluebird, 42; golden-crowned kinglet, 7; cedar waxwing, 24; loggerhead shrike (migrant), 1; starling, 10,000+; myrtle warbler, 7; English sparrow, 224; eastern meadowlark, 54; cardinal, 307; purple finch, 2; Am. goldfinch, 68; eastern towhee, 28; vesper sparrow, 2 (W.H.S., C.C.C.); slate-colored junco, 377; tree sparrow, 84; chipping sparrow, 1 (D.S.); field sparrow, 7; white-crowned sparrow, 37; white-throated sparrow, 19; fox sparrow, 2; swamp sparrow, 2; song sparrow, 103. **Total,** 77 species; about 13,354 individuals. The absence of many songbirds such as robin, hermit thrush, and ruby-crowned kinglet was evidently due to extreme cold weather. (Seen during the week: horned grebe, pintail, golden eagle [F.S.C.], robin, red-wing.—Mrs. James Bartman, Leonard C. Brecher, Floyd S. Carpenter, James Conklin, Carl C. Cornett, James Covert, Jacob P. Doughty, Lucille France, Paxton Gibbs, Harvey B. Lovell, John H. Lovell, Burt L. Monroe, Jr., Burt L. Monroe, Sr., Louis Pieper, Marie Pieper, Evelyn Schneider, Walter H. Shackleton, Jerry Smith, Robert Steilberg, Charles Strull, Don Summerfield, Dave Wilson, Virginia Windstanley, James B. Young (Beckham Chapter, Kentucky Ornithological Society).

202. Mammoth Cave National Park, Ky. (Sloan's Crossing, Katy Pace valley, service area, cabins, campground, Three Springs, new entrance, Chaumont; woods 65%, streams banks 10%, old fields 25%).—Dec. 29; 7 a.m. to 4:30 p.m. Rain early in day, then clear, later cloudy; temp. 55° at start, 35° at return; ground bare. Three observers together. Total hours, 9½ (on foot); total miles, 8. Black duck, 8 (on Green River); black vulture, 20; red-tailed hawk, 3; red-shouldered hawk, 2; barred owl, 1; yellow-shafted flicker, 2; pileated woodpecker, 3; red-bellied woodpecker, 1; yellow-bellied sapsucker, 3; downy woodpecker, 2; blue

jay, 9; Am. crow, 9; Carolina chickadee, 16; tufted titmouse, 18; white-breasted nuthatch, 3; brown creeper, 2; Carolina wren, 2; mockingbird, 2; robin, 61; hermit thrush, 3; eastern bluebird, 4; golden-crowned kinglet, 5; cedar waxwing, 1; myrtle warbler, 11; cardinal, 18; purple finch, 17; Am. goldfinch, 7; eastern towhee, 9; slate-colored junco, 148; tree sparrow, 3; field sparrow, 43; white-throated sparrow, 20; swamp sparrow, 1; song sparrow, 14. **Total,** 34 species; 471 individuals. (Seen in park from Dec. 22 to Dec. 28: mallard, bob-white, English sparrow.) —Henry W. Lix (Park Naturalist), Jimmy Liles, Gordon Wilson.

203. Otter Creek Park (Meade Co.), Ky. (including adjacent farmland; farmland 10%, brushy fields 10%, Ohio River banks 10%, deciduous woods 70%) .—Jan. 1; 9 a.m. to 5 p.m. Cloudy, light snow in morning; temp. 26° to 30°; wind 1-7 m.p.h.; ground nearly bare, ponds frozen but rivers open. Five observers in 2 parties. Total hours, 11 (on foot); total miles, 17 (on foot). Red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 1; bob-white, 30 (2 coveys); herring gull, 1; ring-billed gull, 1; mourning dove, 20; yellow-shafted flicker, 2; pileated woodpecker, 2; red-bellied woodpecker, 8; yellow-bellied sapsucker, 5; hairy woodpecker, 5; downy woodpecker, 9; blue jay, 9; Am. crow, 30; Carolina chickadee, 35; white-breasted nuthatch, 13; brown creeper, 4; Carolina wren, 12; mockingbird, 5; robin, 1; hermit thrush, 5; eastern bluebird, 16; golden-crowned kinglet, 4; myrtle warbler, 3; English sparrow, 1; cardinal, 37; purple finch, 15; Am. goldfinch, 62; eastern towhee, 2; slate-colored junco, 101; tree sparrow, 35; field sparrow, 4; white-throated sparrow, 1; fox sparrow, 1; swamp sparrow, 1; song sparrow, 12. **Total,** 37 species, 495 individuals.—Mr. and Mrs. Fred W. Stamm, Donald Summerfield, Floyd Carpenter, Harvey B. Lovell (Kentucky Ornithological Society).

204. Elizabethton, Tenn. (same area as in past 5 years with center at Valley Forge; part of forming Watauga Lake, Watauga and Doe Rivers, Buffalo and Gap creeks; lake border 5%, stream borders 60%, woodlands 25%, open fields 10%) .—Dec. 26; 7 a.m. to 5:30 p.m. Clear; temp. 8° at start, 30° at end; 0-1-in. snow. Twelve observers in 5 parties. Total hours, 28; total miles, 82 (16 on foot, 66 by car). Sharp-shinned hawk, 1; red-shouldered hawk, 1; sparrow hawk, 4; bob-white, 20; killdeer, 24; Wilson's snipe, 2; mourning dove, 10; belted kingfisher, 2; yellow-shafted flicker, 14; red-bellied woodpecker, 1; yellow-bellied sapsucker, 3; downy woodpecker, 16; eastern phoebe, 1; blue jay, 10; Am. crow, 51; Carolina chickadee, 43; tufted titmouse, 34; brown creeper, 3; winter wren, 3; Carolina wren, 21; mockingbird, 17; robin, 44; hermit thrush, 8; eastern bluebird, 30; golden-crowned kinglet, 5; ruby-crowned kinglet, 3; cedar waxwing, 9; loggerhead shrike, 1; starling, 165; myrtle warbler, 36; English sparrow, 122; eastern meadowlark, 17; red-wing, 1; cardinal, 78; purple finch, 10; Am. goldfinch, 33; eastern towhee, 8; grasshopper sparrow, 1 (observed at 25 ft. for 5 minutes with 8X glasses—F.W.B.); slate-colored junco, 180; field sparrow, 18; white-crowned sparrow, 8; white-throated sparrow, 92; fox sparrow, 23; swamp sparrow, 7; song sparrow, 89. **Total,** 45 species; 1269 individuals. (Seen in area day before census: Bonaparte's gull, 2; Am. pipit, 75 [est.]—L.R.H.) —Fred W. Behrend, J. C. Browning, Robert Burrow, Katherine Doob, Mrs. Hugo Doob, Jr., Thomas W. Finucane, Lee R. Herndon, Cecil Hilton, Mr. and Mrs. George K. Leonard, Lawrence Ramsey, Howard S. Young (Elizabethton Chapter, Tennessee Ornithological Society).

205. Great Smoky Mountains National Park, Tenn. (essentially same area as in past 11 years; circle with 7½-mile radius centering on Bull Head of Mt. LeConte, including a section of the Tennessee-North Carolina divide from Mt. Collins to Newfound Gap; towns of Gatlinburg and Pigeon Forge; altitude range 1200 to 5600 ft.; open farmland 30%, deciduous forest 20%, spruce forest 20%, abandoned fields 15%, towns and suburbs 15%) .—Jan. 2; 7:30 a.m. to 5:30 p.m. Overcast; temp. 26° to 48°; wind SW and W, very light at low altitudes, to 15 m.p.h. at high altitudes; ground frozen in a.m., thawing in p.m. Twenty-two observers in 10 parties. Total party-hours, 75; total miles, 200 (150 by car, 50 on foot). Great blue heron, 1; hooded merganser, 2; turkey vulture, 6; Cooper's hawk, 2; red-tailed hawk, 3; sparrow hawk, 1; ruffed grouse, 8; killdeer, 30; mourning dove, 41; screech owl, 1; belted kingfisher, 2; yellow-shafted flicker, 3; pileated woodpecker, 10; red-headed woodpecker, 1; yellow-bellied sapsucker, 3; hairy woodpecker, 6; downy woodpecker, 11; eastern phoebe, 2; horned lark, 25; blue jay, 20; common raven, 2; Am. crow, 1000 (est.); chickadee (both black-capped and Carolina observed), 143; tufted titmouse, 33; white-breasted nuthatch, 3; red-breasted nuthatch, 12; brown creeper, 7; winter wren, 4; Bewick's wren, 1; Carolina wren, 18; mockingbird, 4; robin, 65; hermit thrush, 13; eastern bluebird, 20; golden-crowned kinglet, 89; ruby-crowned kinglet, 1; loggerhead shrike, 2; starling, 20; myrtle warbler, 11; English sparrow, 222 (est.); eastern meadowlark, 9; red-wing, 15; purple grackle, 3; cardinal, 58; purple finch, 14; pine siskin, 115; Am. goldfinch, 163; eastern towhee, 30; Savannah sparrow, 5; slate-colored junco (both typical slate-colored and Carolina represented), 415; field sparrow, 68; white-throated sparrow, 109; swamp sparrow, 1; song sparrow, 85. **Total,** 55 species (1 additional subspecies); approximately 2938 individuals.—William K. Baker, Mrs. Harvey Broome, Carlos C. Camp-

bell, Mary Ruth Chiles, Brockway Crouch, Mr. and Mrs. Robert J. Dunbar, Robert Goddard, Joseph C. Howell, William M. Johnson, Mr. and Mrs. Frank Leonhard, Mr. and Mrs. Robert A. Monroe, Mrs. E. E. Overton, Arthur Stupka, James T. Tanner, Samuel R. Tipton, Dorothy E. Williams, Mary Williams, D. W. Yambert, William Yambert (members and guests, Tennessee Ornithological Society and National Park Service).

206. Greeneville, Tenn. (Reed farm along Roaring Fork Creek, Bay's Mt., Tusculum College, Davy Crockett Lake; open farmland 50%, woodlands 30%, streambanks 15%, city suburbs 5%).—Dec. 28; 7:30 a.m. to 4:30 p.m. Clear in morning, overcast in afternoon; temp. 30° to 45°; no wind; ground about 75% covered with snow. Six observers in 3 parties. Total hours afield, 21; total miles, 25 (20 on foot, 5 by car). Black duck, 75; turkey vulture, 11; black vulture, 2; Cooper's hawk, 1; red-shouldered hawk, 1; broad-winged hawk, 1 [no details—Ed.]; peregrine falcon, 1; sparrow hawk, 3; ruffed grouse, 1; bob-white, 15; killdeer, 11; mourning dove, 71; horned owl, 1; belted kingfisher, 1; yellow-shafted flicker, 2; pileated woodpecker, 3; red-bellied woodpecker, 5; red-headed woodpecker, 1; yellow-bellied sapsucker, 3; hairy woodpecker, 6; downy woodpecker, 8; eastern phoebe, 2; horned lark, 3; blue jay, 56; Am. crow, 880; Carolina chickadee, 49; tufted titmouse, 26; white-breasted nuthatch, 3; brown creeper, 7; winter wren, 1; Carolina wren, 25; mockingbird, 28; robin, 100; eastern bluebird, 18; ruby-crowned kinglet, 2; cedar waxwing, 123; loggerhead shrike, 1; starling, 42; myrtle warbler, 45; English sparrow, 112; eastern meadowlark, 32; cardinal, 106; purple finch, 25; Am. goldfinch, 65; eastern towhee, 12; slate-colored junco, 67; field sparrow, 42; white-crowned sparrow, 40; white-throated sparrow, 57; song sparrow, 62. **Total,** 50 species; about 2254 individuals.—Eddie Dunham, Johnnie Shanks, Mr. and Mrs. Richard Nevius, Mr. and Mrs. J. B. White.

207. Kingsport, Tenn. (circle with 15-mile diameter, centered at Pactolus school, which is 4 miles southeast of Kingsport; area includes Bay's Mt., and confluence of North and South forks of Holston River; open fields 35%, woodlands 25%, river 30%, city 10%).—Jan. 2; 6 a.m. to 6 p.m. Cloudy in morning, partly cloudy in afternoon; temp. 25° at start, 34° at end; no wind; no snow. Nineteen observers in 12 parties. Total hours, 84; total miles, 86 (23 on foot, 63 by car). Pied-billed grebe, 1; great blue heron, 1; black vulture, 1; Cooper's hawk, 2; red-tailed hawk, 3; sparrow hawk, 1; bob-white, 20; killdeer, 12; Wilson's snipe, 10; mourning dove, 53; screech owl, 1; belted kingfisher, 1; yellow-shafted flicker, 6; red-bellied woodpecker, 5; yellow-bellied sapsucker, 6; downy woodpecker, 25; eastern phoebe, 2; horned lark, 153; blue jay, 80; Am. crow, 88; Carolina chickadee, 108; tufted titmouse, 83; white-breasted nuthatch, 13; brown creeper, 4; Carolina wren, 47; mockingbird, 45; catbird, 5; robin, 5; hermit thrush, 1; eastern bluebird, 17; ruby-crowned kinglet, 1; cedar waxwing, 35; loggerhead shrike, 1; starling, 700; myrtle warbler, 64; English sparrow, 169; eastern meadowlark, 53; red-wing, 1; purple grackle (bronzed), 4; cardinal, 100; purple finch, 8; pine siskin, 10; Am. goldfinch, 107; eastern towhee, 71; Savannah sparrow, 3; slate-colored junco, 208; chipping sparrow, 5; field sparrow, 71; white-throated sparrow, 61; fox sparrow, 6; song sparrow, 90. **Total,** 51 species; 2567 individuals.—Ruth Dunn, Thomas W. Finucane, Lee R. Herndon, William and Hal and Mr. and Mrs. W. C. McHorris, Robert and Martha and Mr. L. W. A. Meyer, Ethel Peerson, Elinor Lee and Mr. and Mrs. R. W. Pugh, Robert Scoggin, Robert and Mrs. Robert Switzer, Albert Wilkes, Mr. and Mrs. Howard S. Young (Kingsport Chapter, Tennessee Ornithological Society).

208. Memphis, Tenn. (1946 area but bottomland coverage reduced on account of partial flooding; wooded bottomlands 30%, deciduous woodlots including city parks 25%, airports, pastures, and old cottonfields 20%, suburban roadsides 25%).—Dec. 26; 6:35 a.m. to 4:45 p.m. Partly cloudy; temp. 19° to 33°; calm; frozen underfoot. Thirty-one observers in 4 main parties, 4 pairs, and a single, the main parties breaking up variously at localities worked; inaccessibility of some bottomlands caused some bunching and retracing after 2:30 p.m. Total party-hours, 90; total party-miles, 260 (80 on foot, 180 by car). Pied-billed grebe, 6; great blue heron, 3; mallard, 7; canvas-back, 11; lesser scaup duck, 315 (300±20, 15); hooded merganser, 1; red-breasted merganser, 7; turkey vulture, 3; black vulture, 13; sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 21; red-shouldered hawk, 5; marsh hawk, 3; sparrow hawk, 28; bob-white, 46; Am. coot, 3; killdeer, 122; Wilson's snipe, 1; ring-billed gull, 108; mourning dove, 30; barred owl, 2; belted kingfisher, 5; yellow-shafted flicker, 165; pileated woodpecker, 2; red-bellied woodpecker, 64; red-headed woodpecker, 15; yellow-bellied sapsucker, 36; hairy woodpecker, 10; downy woodpecker, 45; eastern phoebe, 1; horned lark, 12; blue jay, 292; Am. crow, 58; fish crow, 7; Carolina chickadee, 117; tufted titmouse, 90; white-breasted nuthatch, 4; brown creeper, 11; winter wren, 7; Bewick's wren, 1; Carolina wren, 67; mockingbird, 125; brown thrasher, 59; robin, 507 (175±15, 332); hermit thrush, 52; eastern bluebird, 92; golden-crowned kinglet, 45; ruby-crowned kinglet, 13; cedar waxwing, 207; loggerhead shrike, 34; starling, 43,890 (1187±90, 103 during day; 12,700±1150 morning flocks; 29,800±3100, evening flocks from another point); myrtle warbler, 163; English sparrow,

211+; eastern meadowlark, 129; red-wing, 47; rusty blackbird, 6; purple grackle, 5871 (1710±210, 171 during day; 2080±200 in a.m., 1910±200 at dusk); brown-headed cowbird, 20; unidentified small blackbirds, 660 (±105); unidentified blackbirds 35,100 (±5000); cardinal, 566; purple finch, 27; Am. goldfinch, 154; eastern towhee, 87; Savannah sparrow, 17; Leconte's sparrow, 3; slate-colored junco, 975 (±40); tree sparrow, 7; field sparrow, 137; white-crowned sparrow, 22; white-throated sparrow, 1467 (±40); fox sparrow, 47; swamp sparrow, 39; song sparrow, 145. **Total,** 73 species; about 92,736 individuals.—Mr. and Mrs. Ben B. Coffey, Jr., Mr. and Mrs. Howard Barbig, Mrs. Floy Barefield, Robt. Burton, Mary Davant, Robt. Deupree, Lincoln Emery, Jr., Harry Estes, Jr., Harry Geyer, Jr., Newton Hanson, Mrs. Ruth Harrison, Robt. L. Irwin, Jr., Luther F. Keeton, Lawrence C. Kent, Paul Kisling, Charlton Mabry, Franklin McCamey, Jr., Chas. E. McPherson, Jr., Mrs. J. H. McWhorter, Jim McWhorter, Patricia Moore, Mr. and Mrs. Albert L. Powell, Alice Smith, Demett Smith, Jr., Bill Sullivan, Mrs. M. L. Torti, Brother I. Vincent, Alan Zeigler (Memphis Chapter, Tennessee Ornithological Society).

209. Nashville, Tenn. (area south and west of city, including Radnor Lake, Overton Hills Forest, Leawood, Hobbs Road to Tyne Blvd., Richland Creek, Page Road, Bellemeade, Warner Parks, 101 Pasture, Davidson Road, Hillwood, Bosley Spring and Bell's Bend of the Cumberland River; open fields 30%, wooded pastures 25%, dense woods 15%, thickets, ditchbanks and roadsides 30%).—Dec. 26; 6:30 a.m. to 4:30 p.m. Clear, visibility fine; temp. 15° to 28°; wind NW, average 10 m.p.h.; ground bare (no snow this season). Sixteen observers in 7 parties. Total party-hours, 44 (man-hours, 115); total party-miles, 145 (115 on foot, 30 by car). Pied-billed grebe, 2; great blue heron, 1; mallard, 36; black duck, 4; gadwall, 6; ring-necked duck, 1; lesser scaup duck, 8; Am. golden-eye, 3; Am. merganser, 2; black vulture, 7; Cooper's hawk, 3; red-tailed hawk, 5; red-shouldered hawk, 1; sparrow hawk, 25; bob-white, 10; Am. coot, 5; Wilson's snipe, 1; killdeer, 37; herring gull, 1 (possibly a ring-billed); mourning dove, 231; screech owl, 2; horned owl, 1; belted kingfisher, 2; yellow-shafted flicker, 28; pileated woodpecker, 7; red-bellied woodpecker, 14; yellow-bellied sapsucker, 6; hairy woodpecker, 12; downy woodpecker, 44; eastern phoebe, 1; horned lark, 137; blue jay, 29; Am. crow, 100; Carolina chickadee, 107; tufted titmouse, 69; brown creeper, 5; winter wren, 1; Carolina wren, 14 (scarce this winter); mockingbird, 51; robin, 16; hermit thrush, 1; eastern bluebird, 55; golden-crowned kinglet, 13; ruby-crowned kinglet, 2; cedar waxwing, 15; loggerhead shrike, 3; starling, 225; myrtle warbler, 56; English sparrow, 177; eastern meadowlark, 32; red-wing, 160; rusty blackbird, 200; brown-headed cowbird, 30; cardinal, 250; purple finch, 20; Am. goldfinch, 84; eastern towhee, 47; Savannah sparrow, 12; slate-colored junco, 490; field sparrow, 119; white-crowned sparrow, 8; white-throated sparrow, 64; swamp sparrow, 8; song sparrow, 46. **Total,** 64 species; about 3152 individuals. (Seen on Dec. 24, canvas-back, 1; old-squaw, 1; ring-billed gull, 1; Dec. 27, pine siskin, 8; barred owl, 1.)—B. H. Abernathy, Bill Adams, Tom Butler, Louis Branscomb, Bill Crouch, Albert F. Ganier, Eleanor Gorham, Mr. and Mrs. Robt. M. Hawkins, Helen M. Howell, G. R. Mayfield, Donald Maynard, James A. Robins, E. D. Schreiber, Walter M. Spofford, James Wade (Nashville Chapter, Tennessee Ornithological Society).

210. Reelfoot Lake, Tenn. (from Tiptonville east around lake via Spillway and Samburg to Walnut Log, including timbered bottomlands on west, and hills on east side of lake; deciduous woodland 55%, open lake 20%, roadside 15%, farmland 10%).—Dec. 27; 5:30 a.m. to 5:30 p.m. Overcast in a.m., clear in p.m.; temp. 25° to 40°; wind S, 0-7 m.p.h. Four observers together. Total hours, 12 (8 on foot, 2 in rowboat, 2 in car); total miles, 51 (5 on foot, 3 in rowboat, 43 in car). Pied-billed grebe, 12; double-crested cormorant, 16; great blue heron, 7; Canada goose, 12; mallard, 2400 (est.); black duck, 5; gadwall, 40; baldpate, 4; pintail, 3; blue-winged teal, 2; shoveller, 390; wood duck, 3; redhead, 1; ring-necked duck, 265; canvas-back, 1; lesser scaup duck, 10; Am. golden-eye, 34; buffle-head, 1; hooded merganser, 1; black vulture, 7; Cooper's hawk, 1; red-tailed hawk, 5; red-shouldered hawk, 5; bald eagle, 4; marsh hawk, 3; osprey, 1; peregrine falcon, 1; sparrow hawk, 2; Am. coot, 800 (est.); killdeer, 3; herring gull, 3; ring-billed gull, 16; mourning dove, 1; horned owl, 1; barred owl, 8; belted kingfisher, 3; yellow-shafted flicker, 10; pileated woodpecker, 9; red-bellied woodpecker, 13; red-headed woodpecker, 2; yellow-bellied sapsucker, 6; hairy woodpecker, 3; downy woodpecker, 9; blue jay, 11; Am. crow, 21; Carolina chickadee, 59; tufted titmouse, 15; white-breasted nuthatch, 4; brown creeper, 8; winter wren, 7; Bewick's wren, 3; Carolina wren, 15; short-billed marsh wren, 3; mockingbird, 3; robin, 1; ruby-crowned kinglet, 1; loggerhead shrike, 7; starling, 50,000 (est.); myrtle warbler, 8; Am. goldfinch, 23; English sparrow, 245; eastern meadowlark, 6; red-wing, 2,430,000 (est.)*; rusty blackbird, 2500 (est.); purple grackle (bronzed), 15,000 (est.); brown-headed cowbird, 260; cardinal, 44; eastern towhee, 1; slate-colored junco, 23; tree sparrow, 26; field sparrow, 8; white-throated sparrow, 36; fox sparrow, 55; Lincoln's sparrow, 6 (studied at close range by all 4 observers); swamp sparrow, 4; song sparrow, 16; Lapland longspur, 23. **Total,** 77 species; about 2,502,565 individuals.—*Method of estimate: (1) small flocks counted, and relative size compared

with that of main flock; (2) average speed of birds 20-25 m.p.h.; (3) early and straggling groups disregarded, concentrated flight of birds observed from pier at Samburg streaming past, unbroken, S to N, from 4:34 p.m. to 5:01 p.m., a total of 27 minutes; (4) from comparative figures, estimated 1500 birds per second passing vantage point; (5) computation: 1500x60x27=2,430,000; (6) at height of passage, flock could be seen extending for 3 miles in either direction.—Robert M. Jenkins, James L. Norman, Thomas Walker, Jr., P. W. White, Jr.

211. Birmingham, Ala. (mostly south of city; center in Mountain Brook as in 1944 and subsequent counts; Lake Purdy, Oak Mountain, Shades Valley, East Lake, and Robert's Field, mixed hardwoods and pines 50%, uncultivated fields and pastures 20%, lake front 15%, pine woods 5%, cultivated fields 5%, residential areas 5%).—Dec. 26; 6 a.m. to 6 p.m. Clear in a.m., clouding up from 1 p.m. on; temp. 20° to 39° to 35°; wind NE, veering gradually to ESE during day, 4-10 m.p.h.; ground bare, all water except puddles open as low temperature was purely temporary; water levels very high due to excess of 11.94 in. precipitation in November. Eight observers in 3 parties, 1 observer in a.m. only. Total hours, 34 (32 on foot, 2 in car); total miles, 55 (23 on foot, 32 in car). Pied-billed grebe, 18; great blue heron, 1; mallard, 26; black duck, 11; gadwall, 2; baldpate, 10; ring-necked duck, 73; canvas-back, 12; lesser scaup duck, 24; turkey vulture, 1; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 5; marsh hawk, 1; sparrow hawk, 2; bob-white, 36; Am. coot, 161; killdeer, 65; mourning dove, 41; horned owl, 1; belted kingfisher, 7; yellow-shafted flicker, 46; pileated woodpecker, 6; red-bellied woodpecker, 14; red-headed woodpecker, 8; yellow-bellied sapsucker, 6; hairy woodpecker, 6; downy woodpecker, 15; red-cockaded woodpecker, 1; eastern phoebe, 4; blue jay, 79; Am. crow, 27; Carolina chickadee, 50; tufted titmouse, 39; white-breasted nuthatch, 12; brown-headed nuthatch, 24; brown creeper, 6; winter wren, 1; Bewick's wren, 3; Carolina wren, 54; mockingbird, 41; brown thrasher, 18; robin, 5; hermit thrush, 21; eastern bluebird, 47; golden-crowned kinglet, 48; ruby-crowned kinglet, 27; Am. pipit, 2; cedar waxwing, 397; loggerhead shrike, 5; starling, 560; myrtle warbler, 26; pine warbler, 56; English sparrow, 25+; eastern meadowlark, 154; red-wing, 8; purple grackle (mostly bronzed though there were many intermediates), 800; brown-headed cowbird, 44; cardinal, 158; purple finch, 43; Am. goldfinch, 116; eastern towhee, 178; Savannah sparrow, 43; vesper sparrow, 16; slate-colored junco, 260; chipping sparrow, 1; field sparrow, 108; white-throated sparrow, 322; fox sparrow, 10; swamp sparrow, 72; song sparrow, 130. **Total,** 71 species; about 4643 individuals (all actual counts except those for starling and grackle). Usual count is nearer 10,000 but roost of over 4000 blackbirds was missed. Am. coot are way off in numbers, at least 1000 being usual. Small land birds, especially junco, goldfinch, and pine warbler, were especially abundant. (Seen 2 miles outside area by Imhof Dec. 19, common loon, 1; barred owl, 2; Dec. 20, solitary vireo, 1; Dec. 27, rusty blackbird, 2; Jan. 2, double-crested cormorant, 1; hooded merganser, 24; Virginia rail, 1; Wilson's snipe, 2; ring-billed gull, 1; barred owl, 1; chipping sparrow, 51; Jan. 3, pine-woods sparrow, 1.)—Thomas A. Imhof, Morton H. Perry, M. F. Prather, F. Bozeman Daniel, Bernard Clowdus, Douglas U. Baker, Lucius B. Dubose, Robert M. Rieves (Birmingham Audubon Society).

212. Eudora, Miss. (Camp Currier to Eudora to north side spillway, return to Hernando stopping at Hurricane Creek, remainder detouring out of area to Coldwater, then Arkabutla town to and along dam and to south side spillway; large open lake 25%, earth dam and adjacent fields 10%, shoreline along estuaries 25%, roadside and thickets 20%, deciduous woodland 20%).—Dec. 24; 7:20 a.m. to 3 p.m. Overcast, occasional drizzle 11 a.m. to steady light rain from 2:30 p.m. on; temp. 40° to 37°; wind N, brisk. Four observers together. Total party-miles, 31 (30 by car, 1 on foot). Great blue heron, 4; mallard, 106; black duck, 15; pintail, 68; green-winged teal, 5; blue-winged teal, 1; ring-necked duck, 720; canvas-back, 147; lesser scaup duck, 1565; Am. golden-eye, 2; ruddy duck, 2; unidentified ducks, 325; turkey vulture, 7; black vulture, 10; red-tailed hawk, 1; sparrow hawk, 3; bob-white, 20; killdeer, 2; ring-billed gull, 2; mourning dove, 2; yellow-shafted flicker, 19; pileated woodpecker, 2; red-bellied woodpecker, 7; red-headed woodpecker, 3; hairy woodpecker, 1; downy woodpecker, 3; horned lark, 8; blue jay, 21; Am. crow, 18; Carolina chickadee, 11; tufted titmouse, 5; Carolina wren, 5; mockingbird, 8; robin, 12; hermit thrush, 2; eastern bluebird, 4; ruby-crowned kinglet, 1; cedar waxwing, 3; loggerhead shrike, 6; starling, 132; myrtle warbler, 20; English sparrow, 31; eastern meadowlark, 53; cardinal, 54; purple finch, 20; Am. goldfinch, 10; eastern towhee, 10; Savannah sparrow, 9; Leconte's sparrow, 2; slate-colored junco, 178; field sparrow, 23; white-crowned sparrow, 4; white-throated sparrow, 95; fox sparrow, 3; swamp sparrow, 9; song sparrow, 25. **Total,** 55 species; about 3824 individuals.—Mr. and Mrs. Ben B. Coffey, Jr., Patricia Moore, R. Demett Smith, Jr.

213. Hickory Flat, Miss. (same area as in 1947, omitting south route to Ebenezer Church and Myrtle Tower; pine woods 30%, wooded bottomlands 30%, deciduous woodlots 20%, open fields 20%).—Dec. 25; 8 a.m. to 3:30 p.m. Overcast; wind

N, 5-15 m.p.h.; temp. 32° to 35°. Observers together. Total hours, 7½; total miles, 6 (on foot). Pied-billed grebe, 2; mallard, 3; Am. golden-eye, 1; turkey vulture, 6; black vulture, 3; red-tailed hawk, 3; sparrow hawk, 1; killdeer, 29; mourning dove, 33; yellow-shafted flicker, 4; pileated woodpecker, 1; red-bellied woodpecker, 4; hairy woodpecker, 2; downy woodpecker, 3; blue jay, 15; Am. crow, 14; Carolina chickadee, 21; tufted titmouse, 5; white-breasted nuthatch, 1; brown creeper, 1; Bewick's wren, 1; Carolina wren, 3; mockingbird, 5; brown thrasher, 2; robin, 95; eastern bluebird, 12; golden-crowned kinglet, 2; loggerhead shrike, 3; starling, 680; myrtle warbler, 2; English sparrow, 12; eastern meadowlark, 74; red-wing, 10; purple grackle, 22; unidentified blackbirds, 140; cardinal, 38; Am. goldfinch, 8; eastern towhee, 1; Savannah sparrow, 11; Leconte's sparrow, 1; slate-colored junco, 103; field sparrow, 16; white-throated sparrow, 45; fox sparrow, 4; swamp sparrow, 5; song sparrow, 10. **Total,** 45 species; about 1457 individuals. (Seen Dec. 27: brown-headed nuthatch, 6.)—Mrs. Ben B. Coffey, Jr., Mrs. Floy C. Barefield.

214. Indianola, Miss. (same area I have always covered with additional territory this year; eastward along wooded bayou 1 mile, northward over fields and open lots 1½ miles; by car westward beyond town limits 1½ miles; stubble, pasture, bayou, dumping ground, artificial pond, cotton fields and hedgerows to starting point 3 miles; mixed evergreen and deciduous woodland 25%, open fields, pastures, and stubble 40%, bayou and pond 20%, hedgerows and town yards 15%).—Jan. 1; sunrise to sunset. Sunny, occasionally hazy; temp. 30° to 50°; bayou and pond half covered with film ice; wet underfoot. Total hours, 9½; total miles, 6 (4½ on foot). Horned grebe, 2; black vulture, 3; marsh hawk, 1; sparrow hawk, 3; bob-white, 15; Am. coot, 1; killdeer, 20; Wilson's snipe, 35; least sandpiper, 3 (carefully observed, yellow legs, friendly); mourning dove, 3; barred owl, 3; belted kingfisher, 1; yellow-shafted flicker, 3; red-bellied woodpecker, 4; red-headed woodpecker, 7; yellow-bellied sapsucker, 1; downy woodpecker, 1; blue jay, 17; Carolina chickadee, 9; brown creeper, 2; marsh wren (sp.), 1; winter wren, 2; Carolina wren, 7; mockingbird, 11; brown thrasher, 7; robin, 11; golden-crowned kinglet, 27; cedar waxwing, 23; loggerhead shrike, 3; starling, 100 (est.); myrtle warbler, 6; English sparrow, 90; eastern meadowlark, 4; red-wing, 40; purple grackle, 5000 (est.); brown-headed cowbird, 15; cardinal, 65; purple finch, 5; Am. goldfinch, 50; eastern towhee, 4; vesper sparrow, 8; slate-colored junco, 13; chipping sparrow, 15; tree sparrow, 25 [no details—Ed.]; field sparrow, 7; white-crowned sparrow, 1; white-throated sparrow, 100; swamp sparrow, 2. **Total,** 48 species; about 5776 individuals.—Townsend Boyer.

215. Moon Lake (Lula), Miss. (same route as in 1947; lake from shoreline drive 15%, levee 5%, narrow bayous, timbered 25%, highway and old cotton fields and pasture 10%, weedy fields 25%, wooded bottoms 20%).—Jan. 1; 6:50 a.m. to 5:30 p.m. Cloudy; temp. 25° to 41°; calm; some water in fields. Duck hunting season since Dec. 9. Nine observers, generally in 3 parties. Total party-hours, 18; total party-miles, 90 (10 on foot, 80 by auto). Horned grebe, 4; pied-billed grebe, 4; double-crested cormorant, 320; great blue heron, 3; Canada goose, 40; mallard, 60; gadwall, 7; baldpate, 7; pintail, 3; wood duck, 2; ring-necked duck, 2; canvas-back, 7; lesser scaup duck, 12; Am. golden-eye, 2; ruddy duck, 2027; hooded merganser, 11; Am. merganser, 15; red-breasted merganser, 5; turkey vulture, 2; black vulture, 19; Cooper's hawk, 2; red-tailed hawk, 8; red-shouldered hawk, 4; bald eagle, 1; marsh hawk, 5; sparrow hawk, 4; bob-white, 3; Am. coot, 10; killdeer, 157; woodcock, 1 (first record); herring gull, 1; ring-billed gull, 20; mourning dove, 102; belted kingfisher, 5; yellow-shafted flicker, 35; red-bellied woodpecker, 43; red-headed woodpecker, 2; yellow-bellied sapsucker, 4; hairy woodpecker, 4; downy woodpecker, 10; eastern phoebe, 1; horned lark, 17; blue jay, 37; Am. crow, 31; Carolina chickadee, 38; tufted titmouse, 10; brown creeper, 5; winter wren, 5; Carolina wren, 30; mockingbird, 22; brown thrasher, 7; robin, 16; hermit thrush, 20; eastern bluebird, 7; golden-crowned kinglet, 27; ruby-crowned kinglet, 27; Am. pipit, 13; cedar waxwing, 24; loggerhead shrike, 18; starling, 1069; myrtle warbler, 56; English sparrow, 141; eastern meadowlark, 140; western meadowlark, 2; red-wing, 316; rusty blackbird, 68; purple grackle, 98; brown-headed cowbird, 20; unidentified blackbirds, 320; cardinal, 151; purple finch, 5; Am. goldfinch, 39; eastern towhee, 8; Savannah sparrow, 165; Leconte's sparrow, 8 (best views to date; abnormally tame); slate-colored junco, 287; field sparrow, 55; white-crowned sparrow, 22; white-throated sparrow, 693; fox sparrow, 36; swamp sparrow, 78; song sparrow, 164. **Total,** 81 species; about 7269 individuals.—Mr. and Mrs. Ben B. Coffey, Jr., Mr. and Mrs. Howard Barbig, Mrs. Floy Barefield, Patricia Moore, James L. Norman, Alice Smith, Demett Smith, Jr. (Memphis Chapter, Tennessee Ornithological Society).

216. Tupelo, Miss. (same area as in 1946 and 1947; open farmlands along U.S. 78, west and east, and Highway 6 enroute to park, and Legion Lake; lake 30%, town with U.S. Fish Hatchery, Gum Pond, and part weedy fields nearby 30%, deciduous woods and lake of Tombigbee State Park 30%, mixed pines and hardwoods 10%).—Dec. 25; 9 a.m. to 5 p.m. Overcast, except partly cloudy 2 to 3:30 p.m.; temp. 32° to 39°; wind N, gusty, 10-25 m.p.h.; partly muddy. Observers together. Total miles, 27 (25 by car, 2 on foot). Pied-billed grebe, 10;

mallard, 8; ring-necked duck, 15; canvas-back, 8; lesser scaup duck, 7; ruddy duck, 4; turkey vulture, 100; black vulture, 120; red-tailed hawk, 1; red-shouldered hawk, 2; marsh hawk, 1; bob-white, 8; Am. coot, 3; killdeer, 44; least sandpiper, 1; mourning dove, 17; yellow-shafted flicker, 11; red-bellied woodpecker, 10; yellow-bellied sapsucker, 1; hairy woodpecker, 2; downy woodpecker, 3; eastern phoebe, 1; blue jay, 25; Am. crow, 8; Carolina chickadee, 10; tufted titmouse, 7; brown creeper, 4; Carolina wren, 1; mockingbird, 15; brown thrasher, 2; hermit thrush, 1; eastern bluebird, 37; golden-crowned kinglet, 3; Am. pipit, 12; loggerhead shrike, 2; starling, 899; myrtle warbler, 5; English sparrow, 113; eastern meadowlark, 114; unidentified blackbirds, 2200 (±200); cardinal, 24; purple finch, 27; Am. goldfinch, 16; eastern towhee, 9; Savannah sparrow, 5; slate-colored junco, 138; field sparrow, 354; white-crowned sparrow, 1; white-throated sparrow, 127; swamp sparrow, 24; song sparrow, 43. **Total,** 50 species; about 4603 individuals. Vulture counts within 3±, based on circling flock at 4 p.m. near park lake. The sandpiper was at hatchery as in 1947.—Ben B. Coffey, Jr., R. Demett Smith, Jr.

217. Ann Arbor, Mich. (Huron River valley and adjoining areas from 6 miles northwest of town to 6 miles southeast of town, north 10 miles to Whitmore and Mud lakes, and south 3 miles to airport; bottomland and river 20%, deciduous woodlots 25%, coniferous plantations 5%, fields 15%, orchard 5%, tamarack—poison-sumac swamp 25%, along railway 5%).—Dec. 27; 7:30 a.m. to 12 m., 1:30 to 5:30 p.m. Mostly cloudy; temp. 20° to 32°; wind SW, 0-15 m.p.h.; a little snow in places; lakes frozen, river 60% frozen. Eleven observers in 3 parties. Total hours, 32 (29 on foot, 3 in car); total miles, 87 (34 on foot, 53 in car). Mallard, 100; black duck, 350; Am. golden-eye, 9; Cooper's hawk, 1; red-tailed hawk, 9; red-shouldered hawk, 5; rough-legged hawk, 2; marsh hawk, 1; ring-necked pheasant, 22; herring gull, 2; ring-billed gull, 2; belted kingfisher, 1; hairy woodpecker, 3; downy woodpecker, 26; blue jay, 23; Am. crow, 4; black-capped chickadee, 83; tufted titmouse, 40; white-breasted nuthatch, 18; red-breasted nuthatch, 1; brown creeper, 2; golden-crowned kinglet, 3; starling, 78; English sparrow, 280; cardinal, 44; purple finch, 5; Am. goldfinch, 68; slate-colored junco, 94; tree sparrow, 61; song sparrow, 9. **Total,** 30 species; about 1346 individuals.—H. L. Batts, C. C. Carpenter, Mary Carpenter, D. E. Delzell, J. L. George, Jean Graber, R. R. Graber, H. W. Hann, P. B. Hofslund, M. E. McDonald, M. Miles.

218. Battle Creek, Mich. (Irving Park, Kalamazoo River west of city to Gull Lake and return, 3 feeding stations; in parts of Calhoun and Kalamazoo Counties; open farmland 15%, wooded river and stream banks 30%, shrubby fence growths and highway borders 20%, lake front 25%, feeding stations 10%).—Dec. 26; 7:30 a.m. to 5 p.m. Clear; temp. 2° to 24°; wind SW, 20 m.p.h.; no snow; all small lakes frozen, much ice in river and Gull Lake nearly frozen except for several large water holes. Seven observers in 5 parties (3 at feeding stations. Total miles, 66 (62 by car, 4 on foot); total hours, approximately 37. Canada goose, 2225 (2000±100, 225); mallard, 18; black duck, 418; gadwall, 4 [no details—Ed.]; Am. golden-eye, 494; hooded merganser, 1; Am. merganser, 15; bald eagle, 1; bob-white, 4; coot, 2; herring gull, 7; mourning dove, 6; horned owl, 1; belted kingfisher, 2; hairy woodpecker, 4; downy woodpecker, 13; blue jay, 7; Am. crow, 3; black-capped chickadee, 42; tufted titmouse, 16; white-breasted nuthatch, 10; brown creeper, 1; robin, 1; cedar waxwing, 4; starling, 22; English sparrow, 320; cardinal, 43; purple finch, 33; slate-colored junco, 53; tree sparrow, 47. **Total,** 30 species; about 3817 individuals.—Edward M. Brigham, 3rd, Mrs. L. C. Nielsen, Arthur Staebler, Mrs. Harry J. Theis, Mr. and Mrs. Halbert B. Wood, Lawrence H. Walkinshaw.

219. Bay City, Mich. (4 miles to mouth of Saginaw River, 11 miles to Zilwaukee, 15 miles to Tittabawassee River at Mapleton; open farmland 10%, town suburbs 10%, deciduous farm woodlots 20%, cattail marsh 55%, sandy lake shoreline 5%).—Dec. 26; 8 a.m. to 4 p.m. Clear; temp. 3° to 40°; wind S, 15-20 m.p.h.; ground bare, frozen; all water frozen except below chemical plant in the Tittabawassee River. Total hours, 8 (4 on foot, 2 on skates, 2 in car); total miles, 86 (4 on foot, 12 by skates, 70 in car). Mallard, 52; black duck, 1; Cooper's hawk, 1; red-shouldered hawk, 2; rough-legged hawk, 1; ring-necked pheasant, 2; herring gull, 16; ring-billed gull, 10; hairy woodpecker, 2; downy woodpecker, 5; blue jay, 10; Am. crow, 12; black-capped chickadee, 5; tufted titmouse, 2; white-breasted nuthatch, 3; brown creeper, 3; starling, 22; English sparrow, 108; cardinal, 4; purple finch, 1; Am. goldfinch, 12; slate-colored junco, 15; tree sparrow, 3; song sparrow, 2. **Total,** 24 species; 294 individuals. (Seen in area Dec. 25: white pelican [no details—Ed.], 1; coot, 2; bald eagle, 1.)—E. E. Kenaga.

220. Boyne City (Charlevoix Co.), Mich. (to East Jordan, Charlevoix, Lake Charlevoix area, and along Lake Michigan shore for 2 miles; open farmland 10%, town suburbs 20%, deciduous farm woodlots 20%, spruce, cedar, birch lowlands 30%, water 20%).—Jan. 1; 8:15 a.m. to 5:15 p.m. Clear; temp, 15° to 45° to 30°; wind NW, 5-7

m.p.h.; ground covered with 10-12-in. snow; Lake Michigan and part of Lake Charlevoix open, all moving streams open. Total hours, 8 (6 on foot, 2 in car); total miles, 49 (43 by car, 6 by foot). Mute swan [wild?—Ed.], 8; Canada goose, 12; mallard, 32; black duck, 4; lesser scaup duck, 12; Am. golden-eye, 49; Am. merganser, 28; herring gull, 242; ring-billed gull, 10; belted kingfisher, 1; downy woodpecker, 1; blue jay, 18; Am. crow, 13; black-capped chickadee, 5; starling, 63; English sparrow, 129; Am. goldfinch, 2; tree sparrow, 2. **Total,** 18 species, 631 individuals. (Seen in area Dec. 27: evening grosbeak, 6; snow bunting, 46.)—E. E. Kenaga.

221. Detroit, Mich. (centering at 14 Mile and Lahser Roads, extending to Pontiac on the north, 6 Mile Road to the south, Big Beaver to the east, and Halsted Road to the west; same area covered on last 3 counts; open farm and grassland 32%, swamps, lake shores, and stream banks 11%, conifer groves 2%, mature deciduous woodlands 10%, second-growth deciduous woodlands 25%, towns and suburbs 19%, cemeteries 1%).—Dec. 26; 8 a.m. to 5 p.m. Clear; temp. 8° to 30°; wind WSW, 5-12 m.p.h.; ground mostly bare; all lakes and most streams frozen. Twenty-six observers in 6 parties. Total hours, 42 (24 on foot, 18 by car); total miles, 347 (42 on foot, 305 by car). Snow goose (lesser), 5; mallard, 137; black duck, 44; pintail, 10; blue-winged teal [no details—Ed.], 4; wood duck, 5; redhead, 1; Cooper's hawk, 1; red-tailed hawk, 7; red-shouldered hawk, 1; sparrow hawk, 5; bob-white, 48; ring-necked pheasant, 83; mourning dove, 44; belted kingfisher, 1; yellow-shafted flicker, 3; hairy woodpecker, 1; downy woodpecker, 26; blue jay, 21; Am. crow, 10; black-capped chickadee, 58; tufted titmouse, 21; white-breasted nuthatch, 30; red-breasted nuthatch, 2; brown creeper, 9; golden-crowned kinglet, 10; starling, 91; English sparrow, 650 (550±100, 200); cardinal, 40; Am. goldfinch, 10; white-winged crossbill, 2; slate-colored junco, 215; tree sparrow, 97; song sparrow, 7. **Total,** 34 species; about 1699 individuals. (Seen in area Dec. 23, purple grackle (bronzed), 1; Dec. 28, ring-necked duck, 1.)—Kenneth Sanderson, Georgia Sanderson, Louise Lockeman, Margaret Burton, Richard Sanderson, Bruce Turnbull, Cynthia Boyes, Rima Nickell, Robert Burns, J. R. Ambacher, Arthur Ken, Wilbur T. Bull, Ed. Boyes, Anne Boyes, Charles W. McLaughlin, Grace McLaughlin, Mrs. A. C. Flood, Bob Hutchinson, Mrs. Miller, Kent Miller, Jim Clark, Grant Lashbrook, Alan Walker, Betty Cleland, Billie Nickell, Walter P. Nickell (Detroit Audubon Society).

222. Imlay City, Mich. (Highway M21 to points 8 miles north and 7 miles south, extending west 8 miles from Lapeer-St. Clair county line; open farmland 25%, farm woodlots 10%, shrubby fence growths and roadside borders 50%, cattail marsh 10%, brushy hillsides 4%, feeding stations 1%).—Dec. 28; 6 a.m. to 6 pm. Clear until 1:30 p.m., then cloudy; temp. 32° to 39° to 32°; wind S, 14 m.p.h.; ground bare; all ponds and most streams frozen. Seven observers in 2 parties. Total miles, 116 (6 on foot, 110 by car). Cooper's hawk, 2; red-tailed hawk, 4; red-shouldered hawk, 1; rough-legged hawk, 4; marsh hawk, 6; [unidentified Buteo, 2; unidentified Accipiter, 1;] ruffed grouse, 1; ring-necked pheasant, 8; rock dove, 48 (at farms but no more domesticated than the English sparrows inhabiting the buildings); mourning dove, 41; long-eared owl, 2; short-eared owl, 1; hairy woodpecker, 5; downy woodpecker, 10; blue jay, 2; Am. crow, 571; black-capped chickadee, 56; tufted titmouse, 3; white-breasted nuthatch, 12; brown creeper, 4; starling, 465 (est.); English sparrow, 958 (est); cardinal, 26; evening grosbeak, 1; Am. goldfinch, 12; slate-colored junco, 10; tree sparrow, 84; field sparrow, 2 (D.A.Z., M.A.L.); song sparrow, 3. **Total,** 28 species; about 2345 individuals. (The long-eared and short-eared owls were roosting together in a willow thicket along the edge of a cattail marsh.)—Martha A. Lengemann, Annabel Muir, Gorden Bryan Harry, Donald C. Dodge, Dr. and Mrs. L. M. Zimmerman, Dale A. Zimmerman.

223. Iron Mountain, Mich. (center of town to point 2 miles west, 12 miles north, 2 miles east, 2 miles south; snow-covered fields and plains 10%, pine and spruce tract 10%, mixed growth of pine, birch, and poplar 40%, farmyard and orchard 5%, river bank and open water 10%, hardwood 5%, park 5% [15% of habitat undesignated—Ed.]).—Jan. 2; 7:30 a.m. to 4:30 p.m. Light filmy overcast with the sun showing; temp. 10° to 30°; wind W, 3-5 m.p.h.; unusually little snow, generally 6 in. but many southern exposures completely bare; all water frozen except below power dams. Observers together. Total hours, 9 (8 on foot, 1 in auto); total miles, 40 (9 on foot, 31 by auto). Am. golden-eye, 66; ruffed grouse, 2; hairy woodpecker, 1; downy woodpecker, 3; blue jay, 6; common raven, 2; Am. crow, 1; black-capped chickadee, 30; red-breasted nuthatch, 2; English sparrow, 3; pine grosbeak, 6; white-winged crossbill, 5. **Total,** 12 species; 127 individuals.—J. A. Johnson, D. F. Parmelee.

224. Kalamazoo, Mich. (a circle of 15 miles with center on Drake and West Main Roads, Wolf Lake area, Ravine Road and north to Cooper, east to Comstock, Milham Park and south to Portage Center; open farmland 25%, deciduous woodlots 20%, marsh 40%, running water 15%).—Jan. 2; 8:15 a.m. to 5:30 p.m. Cloudy in morning, clearing

at noon; temp. 24° to 34°; wind SW, 1-7 m.p.h.; ground covered with 2-3-in. soft snow; all fresh water frozen except Balch and Portage creeks, Spring Brook, and Kalamazoo River. Eighteen observers in 5 parties. Total hours, 19 (14 on foot, 5 by car); total miles, 90 (21 on foot, 69 by car). Mallard, 23; black duck, 5; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 1; ruffed grouse, 1; ring-necked pheasant, 6; ring-billed gull, 1; mourning dove, 56; horned owl, 1; belted kingfisher, 2; red-bellied woodpecker, 1; hairy woodpecker, 4; downy woodpecker, 17; blue jay, 29; Am. crow, 385; black-capped chickadee, 59; tufted titmouse, 18; white-breasted nuthatch, 16; brown creeper, 1; robin, 1; golden-crowned kinglet, 1; ruby-crowned kinglet, 1; starling, 143; English sparrow, 368; cardinal, 37; purple finch, 1; Am. goldfinch, 52; slate-colored junco, 117; tree sparrow, 285; song sparrow, 5. **Total,** 31 species; 1639 individuals. (Seen in area Dec. 30: Carolina wren, 1.)—R. Deur, B. Deur, L. Argabright, A. V. Fuller, F. J. Hinds, M. Bacon, C. Bacon, N. Clark, M. Thompson, H. Wiles, G. Post, H. Post, R. Emerson, G. Gerpheide, V. Gerpheide, J. W. Hornbeck, G. Hall, J. B. Fleugel (Audubon Society of Kalamazoo).

225. Muskegon, Mich. (business section to north shore of Muskegon Lake to Dunes State Park, north side of Lake Michigan channel, east shore of Muskegon Lake through business and residential section to south side of channel; business and residential section 50%, wooded dunes and lake shore 50%).—Jan. 1; 9.30 a.m. to 6 p.m. Overcast until 4 p.m., partly cloudy until 6 p.m.; trace of snow; temp. 33°; wind NNW, 12 m.p.h. Total hours, 8½; total miles, 20 (by car and on foot). Black duck, 77; canvas-back, 52; greater scaup duck, 200 (est.); Am. golden-eye, 1184; buffle-head, 5; old-squaw, 46; surf scoter, 1; Am. merganser, 5; herring gull, 277; hairy woodpecker, 1; downy woodpecker, 1; blue jay, 5; black-capped chickadee, 33; red-breasted nuthatch, 1; brown creeper, 7; golden-crowned kinglet, 21; starling, 23; English sparrow, 30; cardinal, 5; purple finch, 3; slate-colored junco, 47; tree sparrow, 1. **Total,** 22 species; 2020 individuals.—Margaret Swisher, Almeda Boulton, Alex Anderson, George Wickstrom, James Nutt, Paul A. and Margaret Drake Elliott.

226. Owosso, Mich. (Shiawassee River valley and nearby areas from Henderson Park, 6 miles north of city, to Shiawasseetown, 7 miles southeast of city; open farmland 20%, town suburbs 5%, upland deciduous woods 25%, wooded river valley 50%).—Dec. 31; 8 a.m. to 5 p.m. Clear; temp. 15° to 32° to 30°; wind NW, 8-12 m.p.h.; 4-in. snow on ground; rivers 75% frozen. Total hours, 9 (8 on foot, 1 in car); total miles, 40 (10 on foot, 30 by car). Am. golden-eye, 1; red-tailed hawk, 2; rough-legged hawk, 2; ring-necked pheasant, 2; hairy woodpecker, 2; downy woodpecker, 4; blue jay, 2; Am. crow, 4; black-capped chickadee, 14; tufted titmouse, 2; white-breasted nuthatch, 2; brown creeper, 5; starling, 11; English sparrow, 39; cardinal, 7; Am. goldfinch, 1; slate-colored junco, 34; tree sparrow, 5; song sparrow, 1. **Total,** 19 species; 140 individuals. (Seen in area Dec. 27, yellow-shafted flicker, 1; Dec. 30, mourning dove, 2; golden-crowned kinglet, 4.)—Bruce V. Wilson.

227. Bloomington, Ind. (campus of Indiana Univ., then north to Griffy Lake and east to Yellowwood Lake; deciduous forest 25%, brushy fields and thickets 25%, open fields 20%, suburban 20%, lake 10%).—Dec. 30; 7 a.m. to 4:30 p.m. Mostly overcast; light snow in p.m.; temp. 25° to 24° to 21°; wind mostly NW, 10 m.p.h.; little snow on ground; lakes and large streams mostly open. Two observers, mostly together. Total hours 9 (8 by foot, 1 by car); total miles, 33 (8 by foot, 25 by car). Horned grebe, 1; green-winged teal, 1; ring-necked duck, 15; Am. golden-eye, 7; old-squaw, 2 (♀); Am. merganser, 3; red-tailed hawk, 1; sparrow hawk, 2; killdeer, 1; mourning dove, 26; yellow-shafted flicker, 3; pileated woodpecker, 1; red-bellied woodpecker, 4; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 16; blue jay, 6; Am. crow, 5; Carolina chickadee, 29; tufted titmouse, 15; white-breasted nuthatch, 5; brown creeper, 2; Carolina wren, 3; mockingbird, 1; robin, 9; eastern bluebird, 6; starling, 50; English sparrow, 65; eastern meadowlark, 1; cardinal, 120; purple finch, 1; Am. goldfinch, 27; eastern towhee, 6; slate-colored junco, 157; tree sparrow, 30; song sparrow, 7. **Total,** 36 species; about 630 individuals. (Seen in area during count period: belted kingfisher, horned lark, golden-crowned kinglet.)—W. E. Ricker, P. D. Skaar.

228. Evansville, Ind. (Courthouse 5 miles southeast to Ohio River bridge; State Hospital grounds, Oak Hill Cemetery, Garvin Park, Mesker Park; parks 50%, open farmland 25%, city 15%, country homes 10%).—Dec. 29; 8 a.m. to 4:30 p.m. Cloudy; temp. 40° to 34°; wind SW to W, 15-20 m.p.h.; ground saturated by heavy rains the day before. Seven observers in 4 parties, 3 independent observers at country homes. Total hours, 28; total miles, 21 (14 by car, 7 on foot). Canvas-back, 9; lesser scaup duck, 5; sparrow hawk, 3; Am. coot, 10; mourning dove, 53; screech owl, 1; belted kingfisher, 1; red-bellied woodpecker, 1; yellow-bellied sapsucker, 2; hairy woodpecker, 1; downy woodpecker, 8; blue jay, 26; Am. crow, 72; black-capped chickadee, 13; tufted titmouse, 10; winter wren, 2; Carolina wren, 1; mockingbird, 6; eastern

bluebird, 12; starling, 3163; English sparrow, 162; purple grackle, 4; cardinal, 26; eastern towhee, 12; slate-colored junco, 58; white-crowned sparrow, 22; white-throated sparrow, 5; song sparrow, 4. **Total,** 28 species; 3692 individuals.—Leslie McKown, Richard Brooks, Glenn Visher, Mrs. Gilbert Schrodt, Mrs. Harry Robinson, Mrs. W. E. Richard, Mrs. John Visher (Evansville Audubon Society).

229. Indianapolis, Ind. (center of town to 13 miles northeast, 11 miles northwest, 5 miles east, 2 miles southwest; Oaklandon Reservoir, Squaw's Hill, Boy Scout camp, Woollen's Gardens, Holliday Park, Riverside Park, Butler Univ. campus, Irvington, Brendonwood. White River at Broad Ripple [note that Maywood was not covered]; open farmland 36%, town suburbs 23%, deciduous farm woodlots 7%, lake area 30%, river area 4%).—Dec. 26; 7:30 a.m. to 4:30 p.m. (Average time per group 6.9 hours.) Clear; temp. 8° to 12° to 10°; wind 8-12 m.p.h.; ground mostly without snow; river partly frozen, lake completely frozen except for an area of about 2.3 miles by ½ mile. Twenty-four observers in 10 parties. Total hours, 64; total miles, 62 (all covered on foot). Whistling swan, 2 (both immatures, seen at 100 yds, through a 20X scope); Canada goose, 59; mallard, 1239; black duck, 1640; gadwall, 1; baldpate, 6; pintail, 9; green-winged teal, 2; wood duck, 5; canvas-back, 18; lesser scaup duck, 5; Am. golden-eye, 2; Am. merganser, 32; Cooper's hawk, 6; red-tailed hawk, 1; bald eagle, 1; peregrine falcon, 1 (heavy mustache marks, slate-blue back—C.E.K.); sparrow hawk, 17; ring-necked pheasant, 1; herring gull, 2; ring-billed gull, 8; mourning dove, 32; screech owl, 1; barred owl, 3; belted kingfisher, 7; yellow-shafted flicker, 7; hairy woodpecker, 3; downy woodpecker, 29; eastern phoebe, 2; blue jay, 37; Am. crow, 193; Carolina chickadee, 28; tufted titmouse, 24; white-breasted nuthatch, 14; brown creeper, 17; Carolina wren, 6; mockingbird, 1; robin, 1; eastern bluebird, 3; golden-crowned kinglet, 12; starling, 465; English sparrow, 140; red-wing, 22; cardinal, 144; purple finch, 2; Am. goldfinch, 41; eastern towhee, 1; slate-colored junco, 286; tree sparrow, 131; fox sparrow, 4; song sparrow, 51; Lapland longspur, 2 (speckled upper breast of male noted, as well as peculiar walking habit—Mr. and Mrs. O.H.M.). **Total,** 52 species; 4766 individuals.—W. B. Barnes, Scott Calvert, Henry West, Steve Wainwright, William Cox, David Mead, Otto H. Mengering, Gertrude Mengering, Hans Mengering, Patricia Geiger, Mr. and Mrs. Joel Hadley, Dorothy White, Mildred Campbell, Edward Mockford, Robert Pedigo, Dr. and Mrs. R. C. Friesner, G. Donald Klopp, Mr. and Mrs. Robert Black, Ward Rice, Robert Rice, Charles E. Keller (Butler Chapter, Indiana Audubon Society).

230. Lafayette, Ind. (15-mile diameter circle, center at top of hill of Route 52 bypass; Wabash River from mouth of Tippecanoe River to 2 miles below R.R. bridge, Wildcat, Wea, Jordan and Indian creeks, Cary Scout camp, Hadley's Lake, Whitsell's Pond, Soldiers' Home, Happy Hollow, Horticultural Farm, Springvale Cemetery, fair grounds, golf courses, and woods northwest of town; creek bottom 39%, river bottom 22%, upland deciduous woods 10%, low woods and brush 8%, cultivated fields 7%, uncultivated fields 10%, pine grove 1%, marsh 3%).—Jan. 1; 5 a.m. to 4 p.m. Cloudiness 0 to .5 to .1; temp. 17° to 35°; wind between WNW and WSW, 8-20-8 m.p.h.; bar. 29.96-29.91; ground bare; creeks and river high, lowlands flooded and partially frozen; ponds frozen. Twenty-one observers in 10 parties. Total hours, 65 (63 on foot, 2 in car); total miles, 86 (58 on foot, 28 in car). Great blue heron, 1; Canada goose, 7; mallard, 303 (300 est., 3); black duck, 53 (50 est., 3); Am. golden-eye, 28; hooded merganser, 1 ♀ (F.H.); Am. merganser, 8; Cooper's hawk, 3; red-tailed hawk, 13; rough-legged hawk, 4; bald eagle, 1 (ad.); marsh hawk, 11; sparrow hawk, 11; bob-white, 23; ring-necked pheasant, 2; killdeer, 1; Wilson's snipe, 7; rock dove, 185 (considered wild birds); mourning dove, 158; screech owl, 1; horned owl, 4; long-eared owl, 3; belted kingfisher, 10; yellow-shafted flicker, 23; red-bellied woodpecker, 29; red-headed woodpecker, 1; yellow-bellied sapsucker, 1 (R.M.); hairy woodpecker, 7; downy woodpecker, 95; horned lark, 14; blue jay, 76; Am. crow, 607; black-capped chickadee, 76; tufted titmouse, 144; white-breasted nuthatch, 18; brown creeper, 45; winter wren, 1; Carolina wren, 20; robin, 3; gray-cheeked thrush, 1 (seen on ground at about 15 ft. with 8X binoculars, with good sunlight from observer's back; dull uniform color throughout upper parts including tail, grayish sides of face with obscure eye-ring, no tail flicking observed, right amount of spotting on breast; seen for 5 minutes from all angles, permitting chance to check with Peterson; bird very tame, but apparently in good health—C.M.K.); eastern bluebird, 12; golden-crowned kinglet, 3; ruby-crowned kinglet, 1 (red in crown, no eye-stripe—R.K., D.S.); starling, 5049 (4700 est., 349); English sparrow, 395; eastern meadowlark, 1; cardinal, 180; purple finch, 104; Am. goldfinch, 96; slate-colored junco, 633; tree sparrow, 414; song sparrow, 81. **Total,** 52 species; about 8968 individuals. (Seen in area Dec. 30, purple grackle [bronzed], 1.)—Irving and Terry Burr, Mrs. D. T. Canfield, Conner Corley, Karleton Crain, Marvin De Jonge, Bruce Gordon and Richard Graves, Frank D. Haller, Ross Horrall, Charles M. Kirkpatrick, Richard Kizer, Russell and Vivian Mumford, Howard and Ted Michaud, Robert Pedigo, Dale Samson, J. L. Van Camp, Merritt S. Webster.

231. Martinsville, Ind. (Grassyfork Fisheries to Cramertown loop, including 4 miles of Indian Creek and White River, circling the crooked hill road; wooded land 40%, ponds 20%, rivers and streams 20%, open farmland 10%, pasture 10%).—Dec. 26; 7 a.m. to 5 p.m. Clear; temp. 3° to 20°; wind NE, 1-3 m.p.h.; ground bare; ponds frozen, few streams open. Two observers together. Total miles, 20 (on foot); total hours, 20. Sparrow hawk, 1; [unidentified hawks (believed to be rough-legged, viewed from 15 ft.), 3]; killdeer, 9; mourning dove, 37; screech owl, 1; belted kingfisher, 2; yellow-shafted flicker, 4; red-bellied woodpecker, 3; yellow-bellied sapsucker, 1; hairy woodpecker, 3; downy woodpecker, 7; blue jay, 2; Am. crow, 18; black-capped chickadee, 29; Carolina chickadee, 2; tufted titmouse, 3; white-breasted nuthatch, 1; brown creeper, 5; Carolina wren, 3; mockingbird, 4; robin, 2; eastern bluebird, 17; starling, 74; English sparrow, 2220 (2000±200, 220); eastern meadowlark, 4; red-wing, 4; purple grackle (bronzed), 7; cardinal, 56; Am. goldfinch, 7, eastern towhee, 1; slate-colored junco, 102; chipping sparrow, 5; tree sparrow, 7; field sparrow, 2; white-throated sparrow, 1; song sparrow, 3. **Total,** 35 species; about 2650 individuals.—Jim Reames, Bill Elmore.

232. New Castle, Ind. (3 miles north, 2 miles west, 2 miles south of town, including woods and fields near Memorial Park and Indiana Village of Epileptics, Blue River, and wooded residential area; deciduous woodlots 43%, low woods and brush-lined creek banks 23%, cultivated fields 20%, wooded suburbs 12%, ponds 2%).—Dec. 30; 9 a.m. to 3:40 p.m. Cloudy, with very light snow for 2 hours; temp. 22° to 23°; wind NW, 12-16 m.p.h.; patches of snow on protected areas; ground frozen; ponds frozen, creeks open. Twelve observers in 4 parties. Total hours, 17 (on foot); total miles, 19. Canada goose, 146; mallard, 130; black duck, 10; canvas-back, 1; red-tailed hawk, 1; red-shouldered hawk, 1; marsh hawk, 2; [hawk (sp.), 2]; mourning dove, 5; barred owl, 1; yellow-shafted flicker, 1; red-bellied woodpecker, 7; hairy woodpecker, 4; downy woodpecker, 30; blue jay, 14; Am. crow, 239; Carolina chickadee, 82; tufted titmouse, 71; white-breasted nuthatch, 19; brown creeper, 7; Carolina wren, 2; starling, 28; English sparrow, 101; eastern meadowlark, 1; cardinal, 57; purple finch, 24; Am. goldfinch, 20; eastern towhee, 1; slate-colored junco, 56; tree sparrow, 69; song sparrow, 32. **Total,** 30 species; 1164 individuals.—Marilyn Beckett, Arthur Branham, Carl Davis, Randall Fisher, Sue Meadows, Marjorie Tapscott, Kelly Wise (High School Biology Club); Mr. and Mrs. Max Forsyth, Alvin Jose, Herbert Montgomery, Howard Weaver (Audubon Society).

233. Northern Porter County and Michigan City, Ind. (Sauk Trails Boy Scout camp—2 miles along Salt and Coffee creeks; Indiana Dunes State Park—2½ miles of beach, 4½ miles on woodland trails; Michigan City harbor; brushy creek banks with some woods and corn field 22%. Lake Michigan shore and harbor 30%, dry deciduous woods 8%, swamp and low wet woodland 40%).—Dec. 28; 7:20 a.m. to 4 p.m. Cloudy, with light to moderately heavy rain from 10:20 a.m. on; temp. 26° to 35°; wind S to SW, 8-12 m.p.h. Three observers together. Total hours, 8⅔; total miles, 31 (22 by car, 9 on foot). Horned grebe, 2; redhead, 3 (round reddish head, etc.—D.P.); lesser scaup duck, 97 (several identified by wing-stripe); Am. golden-eye, 180; buffle-head, 6; old-squaw, 58; Am. merganser, 6; red-breasted merganser, 10; herring gull and ring-billed gull combined, 120; downy woodpecker, 6; blue jay, 13; Am. crow, 3; black-capped chickadee, 16; tufted titmouse, 9; white-breasted nuthatch, 5; starling, 6; English sparrow, 21; rusty blackbird, 435 (400 est., 53; rusty brown color noted—D.P.) [no further details—Ed.]; cardinal, 35; purple finch, 148 (very heavy concentration along brushy creek banks); Am. goldfinch, 5; slate-colored junco, 55; tree sparrow, 14; fox sparrow, 1 (reddish tail, heavily streaked breast—D.P., M.D.); song sparrow, 7. **Total,** 26 species; about 1279 individuals.—Hubert Davis, Marvin Davis, Dick Philips.

234. Richmond, Ind. (Conservation Park, Robinson's Woods, to Centerville and 6 miles west, Clear Creek to Whitewater to Richmond, Glen Miller Park; deciduous woodlands 60%, residential 4%, marsh 10%, agricultural fields 6%, abandoned fields 15%, bottomland 5%).—Dec. 30; 8 a.m. to 4:15 p.m. Heavily overcast with snow in the air; temp. 24° to 22°; wind NNE, 20-25 m.p.h.; ground bare but frozen; lakes frozen, stream and river open. Fourteen observers in 5 parties. Total hours, 31½; total miles, 38 (on foot). Mallard, 49; black duck, 5; red-breasted merganser, 1; Cooper's hawk, 2; red-tailed hawk, 3; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 1; killdeer, 2; mourning dove, 20; barred owl, 2; belted kingfisher, 4; yellow-shafted flicker, 17; red-bellied woodpecker, 20; hairy woodpecker, 4; downy woodpecker, 61; horned lark, 1; blue jay, 14; Am. crow, 189; Carolina chickadee, 152; tufted titmouse, 82; white-breasted nuthatch, 21; brown creeper, 7; Carolina wren, 9; robin, 1; golden-crowned kinglet, 3; northern shrike, 2; starling, 1205; myrtle warbler, 1; English sparrow, 638; eastern meadowlark, 21; red-wing, 2; cardinal, 183; Am. goldfinch, 23; slate-colored junco, 194; tree sparrow, 178; field sparrow, 2; white-crowned sparrow, 2; swamp sparrow, 5; song sparrow, 58. **Total,** 40 species; 3186 individuals.—

James B. Cope, Marie Curtis, Ralph Curtis, Paul Henning, Lawrence B. Hunt, Charles McGraw, Mrs. Don McKinney, Dr. Millard S. Markle, J. A. Snow, Mabelle Snow, Ralston Snow, Cecil Swisher, David Telfair, Mrs. Byerly Ward (Richmond Audubon & Nature Club).

235. South Bend, Ind. (same area as in previous counts; deciduous woods 40%, marshland 20%, open farmland 25%, open river 10%, cedar and spruce groves 5%).—Dec. 26; dawn to dusk. Clear; temp. 8° to 20°; wind SW, 4-10 m.p.h.; no snow on ground; river open, creeks and lakes frozen. Seventeen observers in 4 parties. Total hours, 29 (on foot); total miles, 43 (on foot). Mallard, 84; black duck, 14; shoveller, 1; lesser scaup duck, 2; Am. golden-eye, 51; red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 1; sparrow hawk, 2; Am. coot, 6 (on ground near frozen lake); herring gull, 516; ring-billed gull, 4; mourning dove, 150; belted kingfisher, 3; hairy woodpecker, 9; downy woodpecker, 18; horned lark, 1; blue jay, 29; Am. crow, 273; black-capped chickadee, 80; tufted titmouse, 52; white-breasted nuthatch, 28; brown creeper, 1; Carolina wren, 1; robin, 5; starling, 556; English sparrow, 795; cardinal, 44; Am. goldfinch, 4; slate-colored junco, 198; tree sparrow, 173; field sparrow, 2; song sparrow, 13. **Total,** 33 species; about 3118 individuals.—U. F. Coleman, Charles Metzger, Elmer E. Rodgers, John Pine, H. L. Woolverton, H. L. Woolverton, Jr., Everett Warren, Bro. Edwin Mattingly C.S.C., Dale Harbaugh, Roy Rogers, Merritt C. Farrar, Leonard L. Hofmann, Charles Meek, Max Forsyth, Mr. and Mrs. M. J. McErlain, C. K. Barnes (South Bend Audubon Society).

236. Bird Haven Sanctuary (Richmond Co.), Ill. (from Bird Haven about 5 miles north, east, west, and 4 miles south, deciduous forests of Bird Haven, park and streets of Olney, Weber and Vernor lakes; open farmland 60%, deciduous forests 30%, park and streets of Olney 5%, lakes 5%).—Dec. 31; 7:15 a.m. to 4 p.m. Clear; temp., below freezing at the beginning, thawing by noon; some open water on lakes. Four observers together. Total hours, 8½ (6 in car, 2½ on foot); total miles, 44 (40 by car, 4 on foot). Red-shouldered hawk, 3; marsh hawk, 4; sparrow hawk, 9; bob-white, 11; mourning dove, 9; barred owl, 1; yellow-shafted flicker, 5; red-bellied woodpecker, 5; red-headed woodpecker, 3; hairy woodpecker, 3; downy woodpecker, 11; blue jay, 28; Am. crow, 24; black-capped chickadee, 18; tufted titmouse, 17; white-breasted nuthatch, 5; brown creeper, 2; Carolina wren, 7; mockingbird, 5; eastern bluebird, 20; shrike [sp.], 1; starling, 86; English sparrow, 152; meadowlark [sp.], 41; cardinal, 27; Am. goldfinch, 1; slate-colored junco, 173; tree sparrow, 190; white-crowned sparrow, 3; song sparrow, 4. **Total,** 30 species; 865 individuals.—Mrs. Chester Scherer, Mrs. Howard Shaw, Mary M. Diel, Perna M. Stine.

237. Champaign-Urbana, Ill. (Sangamon River floodplain near White Heath, Brownfield and Trelease woods, Busey Pasture, intermediate farmland; forest 70%, shrubby fields and forest-edge 20%, open country 10%).—Dec. 30; 8 a.m. to 4 p.m. Clear, sunny; wind N, moderate to strong; temp. 24° to 34°; no snow. Six observers in 2 parties in morning, 1 party in afternoon. Total party-hours, 9 (on foot); total party-miles, 15 (on foot); 35 miles of roadside observation. Cooper's hawk, 2; red-tailed hawk, 3; red-shouldered hawk, 1; rough-legged hawk, 4; marsh hawk, 3; sparrow hawk, 2; bob-white, 12 (1 covey); ring-necked pheasant, 1; mourning dove, 3; barred owl, 1; yellow-shafted flicker, 17; red-bellied woodpecker, 12; hairy woodpecker, 8; downy woodpecker, 18; horned lark (prairie), 10; blue jay, 16; Am. crow, 50; black-capped chickadee, 26; tufted titmouse, 35; white-breasted nuthatch, 16; brown creeper, 10; winter wren, 2; Carolina wren, 9; robin, 10; eastern bluebird, 2; starling, 60; English sparrow, 60; cardinal, 26; purple finch, 3; Am. goldfinch, 7; slate-colored junco, 138; tree sparrow, 46; fox sparrow, 1 (S.E.); song sparrow, 6. **Total,** 34 species; 620 individuals.—Don V. Duncan, Steven Emerson, S. C. Kendeigh, W. M. Luce, J. Z. Van Winkle, George Willms.

238. Chicago, Ill. (Indian Boundary Golf Course, South Schiller Woods, Camp Fort Dearborn, Montrose and Belmont harbors; wooded golf course 12%, deciduous river woods 40%, open fields 4%, scout camp and feeder 16%, lake and harbors 28%).—Dec. 31; 6:50 a.m. to 4:50 p.m. Clear; temp. 16° to 34°; wind SW, 1-7 m.p.h.; ground covered with 1-3-in. crusted snow; river partly open. Montrose Harbor frozen, Belmont Harbor partly open. Three observers, 2 together afield, 1 at scout camp feeder for 15-minute intervals throughout day. Total hours, 12 (2 by car, 2 at feeder, 8 on foot); total miles, 14 (6 by car, 8 on foot). Mallard, 70; greater scaup duck, 4; Am. golden-eye, 340; buffle-head, 3; old-squaw, 147; Am. merganser, 36; red-breasted merganser, 75; Cooper's hawk, 1; red-shouldered hawk, 2; ring-necked pheasant, 2; herring gull, 67; ring-billed gull, 5; belted kingfisher, 1; hairy woodpecker, 2; downy woodpecker, 17; blue jay, 2; Am. crow, 30; black-capped chickadee, 43; tufted titmouse, 1; white-breasted nuthatch, 1; red-breasted nuthatch, 1; brown creeper, 4; starling, 120; English sparrow, 48; cardinal, 15; purple finch, 3; slate-colored junco, 94; tree sparrow, 62. **Total,** 28 species; 1194 individuals. (Seen in area Jan. 1: black duck, 1.)—Peter Kulkeski, Jerome J. Carroll, Joseph F. Healy.

239. East St. Louis, Ill. (Lake Park and along shores of Horseshoe Lake and surrounding thickets; open lake shore 75%, willow thickets, 10%, open fields, including nursery 15%).—Dec. 31; 7:30 a.m. to 3 p.m. Clear; temp. 27° at start, 33° at finish; wind W to NW, 5 m.p.h.; ground bare and frozen; lake waters 75% frozen. Total hours, 7½ (4 on foot); total miles, 5 (on foot). Pied-billed grebe, 1; double-crested cormorant, 3; mallard, 218; black duck, 21; gadwall, 7; green-winged teal, 12; baldpate, 6; pintail, 11; shoveller, 17; ring-necked duck, 28; canvas-back, 3; lesser scaup duck, 389; buffle-head, 2; ruddy duck, 20; hooded merganser, 2; Am. merganser, 6; Cooper's hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 3; sparrow hawk, 4; killdeer, 1; Am. coot, 22; belted kingfisher, 3; herring gull, 46; ring-billed gull, 641; mourning dove, 2; yellow-shafted flicker, 4; red-bellied woodpecker, 2; hairy woodpecker, 3; downy woodpecker, 5; blue jay, 6; Am. crow, 18; Carolina chickadee, 4; tufted titmouse, 16; brown creeper, 3; Carolina wren, 2; mockingbird, 1; robin, 2; English sparrow, 46; European tree sparrow, 44; red-wing, 19; cardinal, 35; Am. goldfinch, 17; purple finch, 3; slate-colored junco, 64; tree sparrow, 82; white-crowned sparrow, 9; fox sparrow, 7; swamp sparrow, 4; song sparrow, 32. **Total,** 50 species; 1898 indiv.—James E. Comfort.

240. Joliet, Ill. (14 miles southwest of town to old Tow Path, along Des Plaines River to source of Illinois River, 5 miles east of town to Pilcher Park).—Jan. 1; 7:15 a.m. to 4:30 p.m. Clear; temp. 8° to 45° to 22°; wind NW to N, 1-3 m.p.h.; ground covered with 1-3-in. snow; ponds and backwaters frozen, river channel open. Seven observers together. Total miles, 61 (54 by car, 7 on foot). Mallard, 85; black duck, 26; baldpate, 2; pintail, 706; canvas-back, 1; lesser scaup duck, 63; Am. golden-eye, 20; buffle-head, 1; old-squaw, 5; ruddy duck, 2; hooded merganser, 2; red-tailed hawk, 5; red-shouldered hawk, 6; marsh hawk, 1; ring-necked pheasant, 1; herring gull, 6; ring-billed gull, 2; belted kingfisher, 1; yellow-shafted flicker, 2; hairy woodpecker, 1; downy woodpecker, 11; blue jay, 5; Am. crow, 50; black-capped chickadee, 22; tufted titmouse, 12; white-breasted nuthatch, 2; brown creeper, 3; starling, 52; English sparrow, 50 (est.); cardinal, 8; purple finch, 28; Am. goldfinch, 17; slate-colored junco, 19; tree sparrow, 74; song sparrow, 11. **Total,** 35 species; about 1302 individuals (exclusive of estimated 2000 crows returning to roost at 4 p.m.).—Dr. Geo. H. Woodruff, Mrs. Geo. H. Woodruff, Dr. Gayle Hufford, Gale Hufford, Hilda McIntosh, Wm. Hughes, Dr. J. H. Edgecombe, Mrs. E. D. Collins (Joliet Audubon Soc.).

241. Michael (Calhoun Co.), Ill. (Michael, Hardin, Kampsville, and Hamburg, including Trail Rangers of America area, all in Calhoun County well within diameter of 15 miles; bottomlands 40%, mature woodlands 10%, open farmland 30%, towns 10%, rivers and sloughs 10%).—Jan. 2; 7:30 a.m. to 5 p.m. Temp. 40°; wind E to S, 5-10 m.p.h.; ground covered with 2-in. melting snow. Total miles, 26. Canada goose, 5; snow goose, 50; blue goose, 300; black duck, 2500 (est.); gadwall, 10; pintail, 30; buffle-head, 3; greater scaup duck, 2; lesser scaup duck, 5; Am. golden-eye, 115; Am. merganser, 3; red-tailed hawk, 1; red-shouldered hawk, 1; rough-legged hawk, 1; bald eagle, 5; sparrow hawk, 10; Wilson's snipe, 11; killdeer, 1; mourning dove, 18; screech owl, 1; horned owl, 1; barred owl, 1; belted kingfisher, 2; yellow-shafted flicker, 35; pileated woodpecker, 3; red-bellied woodpecker, 50; red-headed woodpecker, 300 (est.); yellow-bellied sapsucker, 2; hairy woodpecker, 14; downy woodpecker, 50; horned lark, 15; blue jay, 45; Am. crow, 108; black-capped chickadee, 47; tufted titmouse, 75; white-breasted nuthatch, 15; brown creeper, 1; Carolina wren, 16; robin, 56; eastern bluebird, 18; golden-crowned kinglet, 2; cedar waxwing, 1; starling, 72; English sparrow, 260; rusty blackbird, 24; cardinal, 213; Am. goldfinch, 65; slate-colored junco, 270; tree sparrow, 56; field sparrow, 3; white-throated sparrow, 14; swamp sparrow, 2; song sparrow, 38. **Total,** 54 species; about 4946 individuals.—Bill Bremser, Eugene Wilhelm, Bob Wilhelm, Johnnot Chomeau, Clifford Miller, Kenneth Cope, Joe Arnold, Rev. George M. Link (Trail Rangers of America).

242. Morrison (Whiteside Co.), Ill. (timbered pasture 70%, farmland 30%).—Jan. 1; 9 a.m. to 4 p.m. Partly cloudy; temp. 18° to 27°; wind W, 1-7 m.p.h.; 4-in. snow. Total miles, 7 (on foot). Red-tailed hawk, 1; sparrow hawk, 1; bob-white, 14; mourning dove, 1; screech owl, 1; red-bellied woodpecker, 1; downy woodpecker, 2; horned lark, 4; blue jay, 5; Am. crow, 1; black-capped chickadee, 2; tufted titmouse, 2; white-breasted nuthatch, 2; starling, 5; English sparrow, 70; cardinal, 3; slate-colored junco, 8; tree sparrow, 7. **Total,** 18 species; 130 individuals.—John C. Aggen.

243. Murphysboro, Ill. (15-mile diameter, with center midway between Murphysboro and Carbondale; Crab Orchard National Wildlife Refuge, Carbondale Reservoir, Murphysboro, and surrounding territory; lake and lake shore 50%, deciduous woodlands 30%, open fields 10%, miscellaneous 10%).—Dec. 27; 7 a.m. to 5 p.m. Clear; temp. 29° to 42°; wind SSW to S, 1-7 m.p.h.; ground covered with remainder of recent snow; all water frozen except parts of Crab Orchard and Big Muddy River. Five observers in 2 parties. Total hours, 19 (14 on foot,

5 in car); total miles, 68 (23 on foot, 45 in car). Pied-billed grebe, 7; great blue heron, 1; Canada goose, 48 (est.); mallard, 127; black duck, 100; gadwall, 11; baldpate, 31; pintail, 21; redhead, 6; ring-necked duck, 27; canvas-back, 230; lesser scaup duck, 128; Am. golden-eye, 43; buffle-head, 10; ruddy duck, 1; hooded merganser, 24; Am. merganser, 23; red-tailed hawk, 3; red-shouldered hawk, 12; marsh hawk, 8; osprey, 1 (R.B.) [no further details—Ed.]; sparrow hawk, 8; bob-white, 12; ring-necked pheasant, 1; coot, 35; killdeer, 13; herring gull, 434 (est.); ring-billed gull, 281 (est.); mourning dove, 1; barred owl, 5; belted kingfisher, 3; yellow-shafted flicker, 18; pileated woodpecker, 1; red-bellied woodpecker, 5; red-headed woodpecker, 2; yellow-bellied sapsucker, 3; hairy woodpecker, 4; downy woodpecker, 8; blue jay, 49; Am. crow, 35; black-capped chickadee, 13; Carolina chickadee, 4; tufted titmouse, 38; Bewick's wren, 1; Carolina wren, 10; mockingbird, 8; robin, 22; eastern bluebird, 4; golden-crowned kinglet, 1; loggerhead shrike, 1; starling, 290 (est.); English sparrow, 175 (est.); eastern meadowlark, 10; red-wing, 214 (est.); rusty blackbird, 152; purple grackle (bronzed), 6; brown-headed cowbird, 238 (est.); cardinal, 52; Am. goldfinch, 5; eastern towhee, 1; grasshopper sparrow, 1 (observers familiar with species—B.H., T.C.); slate-colored junco, 302 (est.); tree sparrow, 77; field sparrow, 6; white-crowned sparrow, 2; white-throated sparrow, 12; fox sparrow, 1; swamp sparrow, 7; song sparrow, 48. **Total,** 69 species; about 3481 individuals. (Seen in area during time of count: double-crested cormorant, 2; Wilson's snipe, 1; brown creeper, 1; winter wren, 1.)—R. Brewer, T. Collins, B. Hardy, G. Pope, K. Stewart.

244. Pere Marquette State Park (Jersey Co.), Ill. (15-mile circle centered at Lodge, and including Pere Marquette State Park, and Calhoun County Wildlife Refuge; Mississippi and Illinois river lowlands 75%, upland orchards and deciduous woods 25%).—Jan. 1; 5 a.m. to 6:30 p.m. Mild; temp. 20° and up; wind 3 m.p.h. Seventeen observers in 3 parties. Total miles, 28 (20 by car, 8 on foot). Great blue heron, 2; Canada goose, 17; snow goose, 6000 (est.); blue goose, 1000 (est.); mallard, 25,000 (est.); black duck, 1000 (est.); baldpate, 6; pintail, 1000 (est.); shoveller, 2; redhead, 16; ring-necked duck, 3; canvas-back, 75; lesser scaup duck, 730; Am. golden-eye, 100; ruddy duck, 3; hooded merganser, 12; Am. merganser, 500; red-breasted merganser, 15; red-tailed hawk, 2; red-shouldered hawk, 1; bald eagle, 38; marsh hawk, 2; sparrow hawk, 9; bob-white, 2; ring-necked pheasant, 2; Am. coot, 2; killdeer, 1; herring gull, 15; ring-billed gull, 600; mourning dove, 12; screech owl, 1; horned owl, 1; barred owl, 2; belted kingfisher, 2; yellow-shafted flicker, 20; pileated woodpecker, 3; red-bellied woodpecker, 100; red-headed woodpecker, 110; yellow-bellied sapsucker, 3; hairy woodpecker, 14; downy woodpecker, 75; horned lark, 25; blue jay, 50; Am. crow, 350; black-capped chickadee, 69; tufted titmouse, 57; white-breasted nuthatch, 21; brown creeper, 8; Carolina wren, 12; mockingbird, 1; robin, 8; eastern bluebird, 37; golden-crowned kinglet, 3; starling, 94; English sparrow, 430; European tree sparrow, 43; meadowlark [sp.], 6; red-wing, 16; rusty blackbird, 28; cardinal, 376; Am. goldfinch, 64; eastern towhee, 2; slate-colored junco, 620; tree sparrow, 720; white-crowned sparrow, 2; white-throated sparrow, 12; fox sparrow, 2; song sparrow, 162; snow bunting, 1. **Total,** 69 species; about 39,717 individuals. (Seen in area within the week; gadwall, 4; greater scaup, 2; buffle-head, 6; rough-legged hawk, 1; Wilson's snipe, 11; field sparrow, 3; swamp sparrow, 2.)—Jack Buese, Corida Hanna, Cora Hutchinson, O. C. K. Hutchinson, Charles Laun, Rev. George M. Link, Bea Waterbury, Neil Waterbury, David Dale, Bill Bremser, Marie Stelbrink, Eugene Wilhelm, Bob Wilhelm, Johnnot Chomeau, Clifford Miller, Kenneth Cope, Joe Arnold (Pere Marquette Nature League and Trail Rangers of America).

245. River Forest (Cook Co.), Ill. (Forest Preserve areas and farmlands adjoining Des Plaines River between Washington Blvd. and Armitage Ave., Chicago lakefront and yacht harbors between Randolph St. and Northerly Island Airport; deciduous woodland 25%, river banks 25%, lake front and yacht basin 25%, shrubby fields 20%, open farmland 5%).—Jan. 2; 8:45 a.m. to 4:15 p.m. Cloudly to partly cloudy; temp. 28° to 38°; wind NW to W, 1-7 m.p.h.; ground partially covered by ½-1-in. light snow; Des Plaines River completely frozen; yacht basins 50% frozen. Total hours, 7½; total miles, 10 (on foot). Scaup duck (sp.), 2; Am. golden-eye, 67; buffle-head, 1; old-squaw, 19; Am. merganser, 23; red-tailed hawk, 2; red-shouldered hawk, 1; herring gull, 297; ring-billed gull, 1; Bonaparte's gull, 3; yellow-shafted flicker, 1; hairy woodpecker, 5; downy woodpecker, 16; Am. crow, 12; black-capped chickadee, 33; tufted titmouse, 7; white-breasted nuthatch, 3; brown creeper, 3; starling, 254; English sparrow, 118; cardinal, 27; slate-colored junco, 7; song sparrow, 11. **Total,** 23 species; 913 individuals. (Seen in area Dec. 19: eastern towhee, 1; blue jay, 1.)—A. C. Montague.

246. Rockford, Ill. (Central Park, Searles Park, Page Park, Fish Hatchery, Seth Atwood estate, Harrison Township, Hononegah Preserve, and Rock Cut Preserve; open fields and marshlands 15%, creek and river borders 10%, deciduous woodlands 72%, coniferous woods 3%).—Dec. 26; 6:45 a.m. to 3:15 p.m. Clear with a few small cumulus clouds in early afternoon; temp. 2° to 18°; calm at start, with wind rising SW, 10-15 m.p.h.; 2-in. snow on ground; creeks and rivers frozen with some open

areas. Eight observers, 6 together all day, 2 together in afternoon. Total hours, 13; total miles, 62 (27 on foot, 35 by car). Black duck, 1; red-tailed hawk, 9; red-shouldered hawk, 5; rough-legged hawk, 1; marsh hawk, 3; bob-white, 15; ring-necked pheasant, 21; herring gull, 4; mourning dove, 1; horned owl, 3; barred owl, 6; long-eared owl, 3; short-eared owl, 1; yellow-shafted flicker, 6; red-bellied woodpecker, 10; red-headed woodpecker, 8; hairy woodpecker, 2; downy woodpecker, 38; horned lark, 24; blue jay, 38; Am. crow, 84; black-capped chickadee, 51; tufted titmouse, 4; white-breasted nuthatch, 14; brown creeper, 5; starling, 254 (est.); English sparrow, 376 (est.); cardinal, 27; purple finch, 19 (immature or ♀s); Am. goldfinch, 1; slate-colored junco, 117; tree sparrow, 213; swamp sparrow, 2; song sparrow, 9. **Total,** 34 species; about 1375 individuals. (Seen in area during count week: mallard, pintail, Am. golden-eye, Am. merganser, Cooper's hawk, sparrow hawk, meadowlark [sp.], purple grackle—Edith and Harriet Van Duzer.)—Don S. Prentice, Patricia Johnson, Paul Boynton, Lee Johnson, Richard Peterson, Sherman Ehlert, Owen D. Fleener, Harold E. Bennett (North Central Illinois Ornithological Soc.).

247. Southeastern Cook Co., Ill. (Little Calumet River near Wentworth Ave. in Calumet City and near Riverside Park in Hammond, Ind., Green Lake Forest Preserve, Wolf Lake and Eggers Grove, Lakefront Park in Hammond, Calumet Park, Lake Calumet, Jackson Park; dump and slag fill 20%, cattail marsh, brushy swampy wood, and partly wooded river banks 45%, lakeshore, 20%, deciduous woods 15%).—Jan. 1; 7:50 a.m. to 4:05 p.m. Clear until 11 a.m., then smoggy and cloudy; wind W changing to NW, 1-7 m.p.h.; temp. 18° to 30°; rain, sleet, and snow crust on ground from 3 days before; lakes and small rivers almost completely frozen, much broken ice blown near shore on Lake Michigan. Two observers together. Total hours, 8¼; total miles, 50 (15 by car, 5 on foot). Canada goose, 1; lesser scaup duck, 6; Am. golden-eye, 81; Am. merganser, 11; sparrow hawk, 1; bob-white, 24; ring-necked pheasant, 2; herring gull and ring-billed gull, 10,000 (est., huge flocks covering ice and dump at Lake Calumet); mourning dove, 7; yellow-shafted flicker, 1; downy woodpecker, 10; blue jay, 10; Am. crow, 10; starling, 21; English sparrow, 84; red-wing, 21; cardinal, 31; purple finch, 5; Am. goldfinch, 2; slate-colored junco, 47; tree sparrow, 20; song sparrow, 3; snow bunting, 8. **Total,** 24 species; about 10,406 individuals. (Seen in area Dec. 27, belted kingfisher; Dec. 30, black-capped chickadee, tufted titmouse; Jan. 2, hairy woodpecker.)—Hubert Davis, Marvin Davis.

248. Springfield, Ill. (7½-mile radius from center of Springfield, including Lake Springfield and Sangamon River region).—Dec. 26; 7:30 a.m. to 5 p.m. Clear; temp. 7° to 18° to 17° wind SSE to SSW to S, 10-26-11 m.p.h.; ground covered with 2-4-in. crusted snow; all fresh water frozen except parts of Lake Springfield. Eighteen observers in 7 parties. Total miles, 125 (91 by car, 34 on foot). Great blue heron, 1; Canada goose, 60; snow goose, 400 (est.); blue goose, 400 (est.); mallard, 2000 (est.); black duck, 2000 (est.); pintail, 100; green-winged teal, 1; shoveller, 1; redhead, 1; ring-necked duck, 7; canvas-back, 30; lesser scaup duck, 9; Am. golden-eye, 25; buffle-head, 6; ruddy duck, 6; hooded merganser, 12; Am. merganser, 40; red-breasted merganser, 1; red-tailed hawk, 2; red-shouldered hawk, 4; marsh hawk, 2; sparrow hawk, 4; bob-white, 42; Am. coot, 2; herring gull, 1; ring-billed gull, 200; rock dove, 200 (est., living on concrete dam at Lake Springfield, the state capitol, and other public buildings); mourning dove, 63; screech owl, 1; barred owl, 3; belted kingfisher, 1; yellow-shafted flicker, 39; pileated woodpecker, 1; red-bellied woodpecker, 35; red-headed woodpecker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 11; downy woodpecker, 45; horned lark, 50; blue jay, 28; Am. crow, 132; black-capped chickadee, 87; tufted titmouse, 89; white-breasted nuthatch, 20; brown creeper, 11; Carolina wren, 22; mockingbird, 1; eastern bluebird, 18; golden-crowned kinglet, 4; starling, 700 (est.); English sparrow, 350 (est.); cardinal, 175; purple finch, 2; Am. goldfinch, 27; eastern towhee, 1; slate-colored junco, 245; tree sparrow, 99; fox sparrow, 5; song sparrow, 36. **Total,** 60 species; about 7860 individuals. (Seen in area Dec. 24: hermit thrush, 1—Mrs. G.T.)—Dr. and Mrs. Richard Allyn, Christine Bonney, William Butler, Lola Carter, Russell W. Carter, Lena Hardbarger, Lois Hardbarger, Beatrice Hopwood, Lois Hopwood, Mr. and Mrs. Al Kaszynski, Wm. O'Brien, Opel M. Rippey, William Sausaman, Mrs. Claude Sellers, Edith Sutton, Mrs. George Trumbo (Springfield Nature League).

249. Appleton, Wis. (across town and along river road to Kaukauna, south to High Cliff, west on lake road through Menasha to Neenah, north through Riverside Cemetery to Center Swamp and return; river banks 20%, lake front 15%, hardwoods 12%, open fields 25%, city streets 12%, cemetery 8%, swamp border 8%).—Jan. 2; daylight to dusk. Light clouds occasionally breaking during forenoon; ½-in. hoarfrost covering all vegetation but falling at noon with clearing skies; temp. 14° to 32°; wind imperceptible; 8-in. snow; river almost closed, lake frozen. Three observers in 1 party. Total hours, 9 (5 on foot, 4 by car); total miles, 82 (5 on foot, 77 by car). Mallard, 1; black duck, 79; canvas-back, 2; Am. golden-eye, 265; Am. merganser, 17; Buteo (sp.), 1; herring gull, 1; hairy woodpecker, 1; downy woodpecker, 3; blue jay, 6;

Am. crow, 3; black-capped chickadee, 4; white-breasted nuthatch, 6; brown creeper, 1; starling, 23; English sparrow, 50; meadowlark (sp.), 2; cardinal, 4; evening grosbeak, 7; slate-colored junco, 6; tree sparrow, 10. **Total,** 21 species; 492 individuals.—Mrs. Walter E. Rogers, Dexter Wolfe, Walter E. Rogers.

250. Cedar Grove, Wis. (fields west of town, woods along Lake Michigan and Bahr Creek east of town, Port Washington harbor; fields 40%, woods 35%, lake shore 25%).—Jan. 1; 9:30 a.m. to 4:45 p.m. Cloudy; temp. 18° to 30°; wind NW, 8-12 m.p.h.; ground covered with 3-4-in. snow; Bahr Creek frozen, Lake Michigan open except for about 25 yds. of shore ice. Two observers together. Total hours, 7¼ (6½ on foot, ¾ by car); total miles, 37 (12 on foot, 25 by car). Mallard, 1; black duck, 2; canvas-back, 8; greater scaup duck, 3 (seen at close range); lesser scaup duck, 70; Am. golden-eye, 160 (est.); old-squaw, 225; white-winged scoter, 1 (6 closely observed off Bahr Creek; observers familiar with species); ruddy duck, 1; Am. merganser, 23; red-breasted merganser, 6; sparrow hawk, 1; European partridge, 28; ring-necked pheasant, 2; Am. coot, 1; herring gull, 328 (300 est., 28); ring-billed gull, 35; rock dove, 8 (living wild along creek); downy woodpecker, 2; Am. crow, 28; black-capped chickadee, 8; robin, 3; starling, 50; English sparrow, 230 (est.); evening grosbeak, 1; pine siskin, 1; slate-colored junco, 18; tree sparrow, 35; song sparrow, 3; snow bunting, 51. **Total,** 30 species; about 1333 individuals. (Absence of blue jays, cardinals, and goldfinches is unprecedented.)—Gordon H. Orians, George W. Treichel.

251. Kenosha, Wis. (same area as in 1947; farm roads and adjoining fields 63%, farm woodlots 6%, heavy deciduous woodland 19%, lake front 12%).—Dec. 27; 7:30 a.m. to 4:45 p.m. Overcast; temp. 19° to 29°; wind W, 15-20 m.p.h.; ground in woodlands snow covered. Two observers together. Total hours, 9¼ (8 on foot, 1¼ by car); total miles, 14 (9 on foot, 5 by car). Am. golden-eye, 30; old-squaw, 384; Am. merganser, 6; red-breasted merganser, 134; red-tailed hawk, 2; rough-legged hawk, 1; sparrow hawk, 1; ring-necked pheasant, 4; herring gull, 105; ring-billed gull, 2; Bonaparte's gull, 56; downy woodpecker, 5; blue jay, 9; Am. crow, 11; black-capped chickadee, 19; starling, 223; English sparrow, 104; cardinal, 5; slate-colored junco, 5; tree sparrow, 34. **Total,** 20 species; 1140 individuals.—Jerome J. Carroll, Joseph F. Healy.

252. Lake Geneva, Wis. (around lake by car; lake front 30%, cattail marsh 10%, swamps 25%, open farmland 5%, tamarack swamp 5%, deciduous woods 25%).—Dec. 26; 7 a.m. to 4 p.m. Clear; temp. 5° at start, 22° at finish; wind 5-7 m.p.h.; 1-2-in. snow; lake partly frozen. Observers usually together, sometimes dividing into 3 groups. Total miles, 41 (30 by car, 11 on foot). Canada goose, 157; mallard, 214; black duck, 79; green-winged teal, 3; redhead, 11; ring-necked duck, 4; canvas-back, 700±; scaup duck (sp.), 47; golden-eye, 1500±; buffle-head, 5; old-squaw, 17; white-winged scoter, 1; surf scoter, 1; ruddy duck, 4; red-tailed hawk, 2; rough-legged hawk, 1; ferruginous hawk, 1; marsh hawk, 1; ring-necked pheasant, 2; Am. coot, 163; herring gull, 50; ring-billed gull, 1; mourning dove, 4; red-headed woodpecker, 3; hairy woodpecker, 4; downy woodpecker, 11; blue jay, 3; Am. crow, 42; black-capped chickadee, 47; white-breasted nuthatch, 9; golden-crowned kinglet, 1; starling, 36; English sparrow, 100; blackbird (sp.?), 1; cardinal, 5; purple finch, 3; slate-colored junco, 33; tree sparrow, 27; song sparrow, 4. **Total,** 39 species; about 3297 individuals. (The entire absence of all mergansers was very unusual. The ferruginous hawk was an immature, studied at close range. The habit of hovering, light-colored tail, and white at base of primaries was noted; also checked with skins at Chicago Natural History Museum by Nork.)—Earl Anderson, Mrs. Amy Baldwin, J. J. Carroll, Mr. and Mrs. C. T. Clark, J. Healy, T. J. Nork, C. O. Palmquist, Mrs. L. Spring, R. J. Zusi (Chicago Ornithological Society).

253. Mazomanie, Wis. (selected areas along both sides of the Wisconsin River between Mazomanie and Prairie du Sac; deciduous woodland 40%, river mostly frozen 25%, marsh 20%, open fields 10%, residential 5%).—Jan. 1; 6:45 a.m. to 4:30 p.m. Overcast; temp. 1° to 20°; wind slight; 2-in. snow on ground. Two observers together. Total hours, 9¾ (8 afoot, 1¾ by car); total miles, 48 (8 afoot, 40 by car). Am. golden-eye, 7; Am. merganser, 20; bald eagle, 3; marsh hawk, 1; ring-necked pheasant, 1; herring gull, 1; mourning dove, 2; horned owl, 3; barred owl, 1; pileated woodpecker, 2; red-bellied woodpecker, 10; red-headed woodpecker, 8; hairy woodpecker, 3; downy woodpecker, 5; blue jay, 25; Am. crow, 3; black-capped chickadee, 20; tufted titmouse, 2; white-breasted nuthatch, 10; brown creeper, 1; starling, 2; English sparrow, 50; red-wing, 1; cardinal, 4; Am. goldfinch, 6; slate-colored junco, 40; tree sparrow, 160. **Total,** 27 species; 394 individuals.—N. R. Barger, Sam Robbins.

254. Milwaukee, Wis. (area approximately the same as in the 2 preceding years; same city parks and parkways, Bender Dump, Wind Lake, Cedarburg Swamp, Upper River Road, sections of the

Lake Michigan front and fields and woods on west, northwest, and southwest sides of city; river bottoms 22%, lake front 20%, woods 20%, fields 16%, tamarack swamp 15%, coniferous plantings 5%, feeding stations 2%).—Dec. 26; dawn to dusk. Fair; temp. 9° to 21°; wind WSW, 20-25 m.p.h.; ground with light covering of old snow; Lake Michigan open except for breakwater enclosure. Eighteen observers in 6 parties and at 4 feeding stations. Total hours, 44 (34 on foot, 10 by car); total miles, 285 (52 on foot, 233 by car). Blue goose, 2; snow goose, 1 (both species of geese have been present in the Juneau Park lagoon since mid-November, becoming quite tame and being seen by all observers in the city); mallard, 325; black duck, 148; baldpate, 1; pintail, 4; shoveller, 35; redhead, 3; canvasback, 62; greater scaup duck, 30 (at close range; green sheen to the head clearly noted—G.H.O., G.W.T.); lesser scaup duck, 278; Am. golden-eye, 1500 (1500±100); buffle-head, 305; old-squaw, 166; ruddy duck, 2; hooded merganser, 3; Am. merganser, 2210 (2150 est., 60); red-breasted merganser, 325; red-tailed hawk, 9; red-houldered hawk, 1; rough-legged hawk, 4; sparrow hawk, 2; ruffed grouse, 1 (fresh tracks); European partridge, 10; ring-necked pheasant, 68; Am. coot, 1; knot, 1 (on Bradford Beach since early December; in perfect condition and very tame; seen by all observers in and around Milwaukee; what it is finding to eat is a mystery to all, since the beach is covered with ice); herring gull, 6590 (6500 est., 90); ring-billed gull, 655 (500 est., 155); Bonaparte's gull, 353; mourning dove, 3; rock dove, 51 (living wild on ledges of buildings and in empty box cars); screech owl, 1; long-eared owl, 4; short-eared owl, 1 (calling); belted kingfisher, 3; yellow-shafted flicker, 1; hairy woodpecker, 7; downy woodpecker, 26; blue jay, 41; Am. crow, 195; black-capped chickadee, 119; white-breasted nuthatch, 11; red-breasted nuthatch, 1; robin, 1; hermit thrush, 1 (feeding on rotten apples in an old orchard—A.A., B.K., H.C.M.); starling, 353; English sparrow, 412; brown-headed cowbird, 1 (at close range in the Bender Dump—M.F.D., Mrs. F.L.L.); cardinal, 34; purple finch, 1; pine siskin, 14; Am. goldfinch, 78; slate-colored junco, 146; tree sparrow, 238; white-crowned sparrow, 3 (have been in the Bender Dump for several weeks; seen by many observers so there is no chance of misidentification); fox sparrow, 1; swamp sparrow, 3; song sparrow, 6. **Total,** 59 species; about 14,857 individuals. (Seen within one week of count; horned grebe, pied-billed grebe, gadwall, ring-necked duck, Wilson's snipe, horned lark [prairie], Am. pipit, brown creeper, eastern towhee, white-throated sparrow, snow bunting.)—Audrey Andrews, Mrs. A. P. Balsom, Marie Daetz, Mrs. C. Decker, Mary F. Donald, Mr. and Mrs. C. P. Frister, Daniel Frister, Dr. A. Hehn, Bernard Kaiman, Mrs. F. L. Larkin, Lauren Meyers, Helmuth C. Mueller, Gordon H. Orians, H. L. Orians, Frank Schaeffer, John Schaeffer, George W. Treichel.

255. Seneca, Wis. (west-central Crawford County from Seneca northwest toward Mississippi River, along east side Mississippi River channel for about ¼ mile south of Locks No. 9, below Lynxville, and some river-bottom area a few miles farther south; deciduous woodlands 40%, pasture and open farmland 10%, beaver ponds and small stream 20%, along Mississippi River channel 10%, Mississippi River bottoms 20%).—Dec. 25. Clear; temp. 4° to 18° to 12°; wind N, 1-8 m.p.h.; ground covered with 2-in. snow; ponds frozen, stream and river channel partly open. Total hours, 7½; total miles, 46 (34 by car, 12 by foot). Common loon, 4; lesser scaup duck, 32; Am. golden-eye, 235; red-tailed hawk, 3; bald eagle, 19 (16 mature, 3 immature); ruffed grouse, 1; Am. coot, 6; belted kingfisher, 1; pileated woodpecker, 2; red-bellied woodpecker, 2; red-headed woodpecker, 11; hairy woodpecker, 4; downy woodpecker, 9; blue jay, 10; Am. crow, 2; black-capped chickadee, 13; white-breasted nuthatch, 9; starling, 9; English sparrow, 54; cardinal, 4; Am. goldfinch, 4; slate-colored junco, 30; tree sparrow, 96. **Total,** 23 species; 560 individuals.—Clarence Paulson.

256. Waukesha, Wis. (2 wooded areas in city, farmland north of city, west to Dousman, southwest along Fox River valley to Mukwonago Marsh, to Saylesville; open farmlands 47%, deciduous farm woodlots 18%, tamarack swamp 10%, grassy marsh 12%, town suburbs 13%).—Dec. 26; 7 a.m. to 4 p.m. Cloudy; temp. 10° to 21°; wind W, 5-20 m.p.h.; ground frozen, light covering of old snow; all water frozen except small areas of Fox River and 1 spring. Eleven observers in 2 parties. Total hours, 10½ (5:40 on foot, 4:50 by auto); total miles, 89½ (8½ on foot, 81 by auto). Mallard, 50; red-tailed hawk, 1; rough-legged hawk, 9; marsh hawk, 5; sparrow hawk, 2; European partridge, 32 (3 coveys); herring gull, 1; horned owl, 1; hairy woodpecker, 2; downy woodpecker, 9; blue jay, 9; Am. crow, 650; black-capped chickadee, 11; white-breasted nuthatch, 3; starling, 38; English sparrow, 268; Brewer's blackbird, 1 (purplish head and no rusty, observed at close range—L.E.C., O.C.); cardinal, 4; Am. goldfinch, 9; slate-colored junco, 96; tree sparrow, 169. **Total,** 21 species; 1370 individuals.—Clarence A. Anthes, Vincent P. Batha, Harlow Bielefelt, L. E. Compton, Olive Compton, Albert G. Johnson, S. Paul Jones, Charles E. Nelson, Jr., James Selle, Roy Wakeman (Benjamin F. Goss Bird Club).

257. Cedar Creek Forest, Minn. (35 miles north of Minneapolis; north edge of Cedar Creek Forest and 10 miles south to Soderville, concentrated count in Cedar Creek Forest only; open farmland, 70%, dense cedar bog 15%, deciduous upland 13%, lakeshore 2%).—Jan 2; 8:30 a.m. to 4:30 p.m. Clear to partly cloudy; temp. 19° to 30°; wind SE, 13.5 m.p.h. (highest 17 m.p.h.); precipitation, 0.02 in. (snow); ground covered with 3-6-in. crusted snow; all water frozen except a small spring-hole in Cedar Lake. Twenty-one observers in 4 parties. Total miles, 36 (20 in car). Golden eagle, 1; ruffed grouse, 5; pileated woodpecker, 1; hairy woodpecker, 3; downy woodpecker, 2; blue jay, 15 (8 seen feeding on minnows at open spring-hole); Am. crow, 17; black-capped chickadee, 41; white-breasted nuthatch, 4; red-breasted nuthatch, 3 (at feeding station); English sparrow, 13; evening grosbeak, 4; redpoll (sp.), 13; pine siskin, 21; Am. goldfinch, 35; slate-colored junco, 4; tree sparrow, 1. **Total,** 17 species; 183 individuals.—Meribeth Mitchell, Mrs. I. A. Lupient, W. J. Breckenridge, Lewis Barrett, Ken Morrison, Mr. and Mrs. Bill Clements, John Rehbein, Sam McIver, Mr. and Mrs. Jerry Paul, Theodora Melone, Elsie Hinchley, Ruth Self, Dorothy Mierow, Byron Harrell, Mrs. A. D. Corniea, W. R. Hiller, Dwain Warner, Harvey Gunderson, Bruce Hayward (Minnesota Bird Club).

258. Duluth, Minn. (Fond du Lac to French River along St. Louis River and Lake Superior including Minnesota Point; town suburbs 25%, deciduous city parks 50%, sand dunes 25%).—Jan. 2; 8:30 a.m. to 4:30 p.m. Partly cloudy; temp. 22° to 27°; wind NE, 5-10 m.p.h.; ground covered with 2-4-in. crusted snow; all fresh water frozen except Lake Superior. Sixteen observers in 9 parties. Total hours, 40 (38 on foot, 2 by auto); total miles, 54 (44 on foot, 10 by auto). Am. golden-eye, 48; sharp-shinned hawk, 1; ruffed grouse, 5; ring-necked pheasant, 2; glaucous gull, 4; herring gull, 407; horned owl, 2; snowy owl, 1; pileated woodpecker, 1; hairy woodpecker, 11; downy woodpecker, 59; Canada jay, 3; blue jay, 20; Am. crow, 2; black-capped chickadee, 101; white-breasted nuthatch, 2; red-breasted nuthatch, 20; robin, 10; golden-crowned kinglet, 8; Bohemian waxwing, 25; starling, 225; English sparrow, 144; cardinal, 3; evening grosbeak, 67; pine grosbeak, 221; common redpoll, 46; pine siskin, 106; Am. goldfinch, 3; red crossbill, 6; white-winged crossbill, 2; slate-colored junco, 12. **Total,** 31 species; 1567 individuals.—Mr. and Mrs. Ralph Boeder, Mr. and Mrs. J. K. Bronoel, Margaret Brown, Sam Cox, O. A. Finseth, Orr Hamilton, Olga Lakela, Catherine Lieske, Susan Lovald, Mr. and Mrs. Harvey Putnam, Frances Riddle, R. Shoberg, Helen Smith.

259. Minneapolis, Minn. (Theodore Wirth Park, Thomas S. Roberts Bird Sanctuary, Minnesota River valley, Nine Mile Creek; river bottom 40%, city park 30%, open farmland 20%, mixed woodland 10%).—Dec. 28; 9 a.m. to 4 p.m. Cloudy; temp. 33° to 34° to 32°; wind S to NE, 1-7 m.p.h.; ground covered with 2-3-in. old snow; all water frozen except a few spring-fed brooks. Thirteen observers in 3 parties. Total hours, 17 (8 by car, 9 on foot); total miles, 33 (11 on foot, 22 by car). Mallard, 13; black duck, 2; sparrow hawk, 1; ring-necked pheasant, 66; Wilson's snipe, 1; belted kingfisher, 1; pileated woodpecker, 1; red-bellied woodpecker, 1; hairy woodpecker, 10; downy woodpecker, 22; blue jay, 51; Am. crow, 3; black-capped chickadee, 83; white-breasted nuthatch, 36; brown creeper, 4; robin, 1; starling, 37; meadowlark (sp.), 1; English sparrow, 924; red-wing, 15; cardinal, 35; purple finch, 31; Am. goldfinch, 1; slate-colored junco, 194; tree sparrow, 174. **Total,** 25 species; 1708 individuals.—Lula May Aler, Mrs. Scott F. Carmean, Mrs. M. W. Evans, Anna J. Johnson, Mrs. G. R. Magney, Florence Messer, Mrs. C. R. Nelson, Mrs. E. D. Swedenborg, Mrs. P. D. Tryon, Mr. and Mrs. William Ure, Mrs. R. H. Wells (Minneapolis Audubon Society).

260. Minneapolis, Minn. (from Camden Park, Minneapolis, for about 20 miles, on both sides of the Mississippi River, to Anoka, stopping at 20 wooded and brushy spots; river banks and valleys 75%, open farmland 10%, willow marsh 5%, town suburb 10%).—Jan. 2; 9 a.m. to 5 p.m. Clear; temp. 20° to 25° to 20°; wind WNW, 8-12 m.p.h.; ground covered with 6-8-in. hard-crusted snow; all fresh water frozen except 1 mile of water below Coon Creek Dam. Twenty-two observers in 3 parties. Total hours, 8; total miles, 40. Am. golden-eye, 75; Am. merganser, 1; ring-necked pheasant, 48; belted kingfisher, 1; pileated woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 9; blue jay, 18; black-capped chickadee, 41; white-breasted nuthatch, 5; brown creeper, 1; golden-crowned kinglet, 2; cardinal, 6; purple finch, 1; Am. goldfinch, 50; slate-colored junco, 9; tree sparrow, 87. **Total,** 17 species; 356 individuals.—Major C. H. Snyder, Mildred Snyder, Edith Kees, Earl Kees, Mr. Fine, Jimmy Fine, John Pratt, Mr. and Mrs. Henry Pratt, Michael Herz, Mr. and Mrs. M. E. Herz, Mr. and Mrs. R. E. Rustand, Mrs. Victor Smith, Mr. and Mrs. Phillip Layman, Mr. Bogren, John Futcher, Ruth Hopkins, Boyd Lien, Helen Towle, George Rickert (Minneapolis Bird Club).

261. St. Paul, Minn. (Rice St., Filtration Plant grounds, McMenemy Bog and adjacent woods, Lakes Vadnais and Sucker, pine woods, along Edgerton Rd., Johnson Parkway, 2 miles along Mis-

sissippi River; coniferous forest 40%, open farmland 15%, deciduous woodlots 20%, reedy marsh 15%, river-bottom land 10%).—Dec. 26; 9 a.m. to 4:30 p.m. Cloudy and snow flurries, changing to partly cloudy; temp. 6° to 15° to 12°; wind WSW, 15 m.p.h.; 5-in. snow on ground, crusted, except in heavy woods; all waters frozen except city water canals, and some open areas in Mississippi River. Seventeen observers, in separate parties, one-half of observation time. Total hours, 14 (on foot); total miles, 24 (on foot). Mallard, 5; black duck, 1; Am. golden-eye, 45; goshawk, 1; European partridge, 7; ring-necked pheasant, 7; horned owl, 1; barred owl, 2; hairy woodpecker, 3; downy woodpecker, 4; blue jay, 10; Am. crow, 2; black-capped chickadee, 70; white-breasted nuthatch, 6; red-breasted nuthatch, 2; brown creeper, 2; northern shrike, 1; starling, 90; English sparrow, 95; rusty blackbird, 14; cardinal, 8; Am. goldfinch, 3; red crossbill, 2; slate-colored junco, 60; tree sparrow, 10. **Total,** 25 species; 451 individuals.—Jack Bardon, Paul Davison, Oscar Enstrom, Sr., Oscar Enstrom, 2nd, A. S. Fine, Jimmie Fine, James Haner, Gordon Kimble, Caroline Larson, Wynn Lawrence, Len. C. Lustig, A. C. Rosenwinkel, Carlyle Sather, Dorothy Sundry, Robert Walsh, Mrs. Walsh, Dr. V. Whipple (St. Paul Audubon Society).

262. South St. Paul, Minn. (along Mississippi River to Grey Cloud Island and Prescott, Wis.; open woodland 50%, open farmland 30%, open water along river 20%).—Jan. 1; 8:30 a.m. to 4 p.m. Cloudy, light snow; temp. 9° to 17°; wind SW to W, 10 m.p.h.; ground covered with 3-7-in. crusted snow; all fresh water frozen except 3 miles of Mississippi River. Thirteen observers. Mallard, 87; Am. golden-eye, 59; Am. merganser, 52; rough-legged hawk, 1; bald eagle, 1; ring-necked pheasant, 3; Am. coot, 3; herring gull, 2; hairy woodpecker, 2; downy woodpecker, 1; blue jay, 14; Am. crow, 2; black-capped chickadee, 15; white-breasted nuthatch, 2; starling, 54; English sparrow, 297; cardinal, 12; redpoll, 16; slate-colored junco, 49; tree sparrow, 58. **Total,** 20 species; 730 individuals.—Herman Brown, Mr. and Mrs. James Clements, O. G. Enstrom, Sr., O. Enstrom, Jr., Adolph Fine, James Fine, James Haner, Caroline Larson, Robert Smith, Dorothy Sundry, Dr. Whipple, Carlyle Sather.

263. Walker, Minn. (from town to points approximately 5 miles in each direction, around Walker and Kabekona bays on Leech Lake, and within the Chippewa National Forest; coniferous forest 60%, cut-over poplar and birch stands with numerous small clearings 40%).—Jan. 1; 9 a.m. to 4 p.m. Cloudy; temp. 10° to 22° to 15°; wind very light; ground covered with 8-10-in. soft snow; heavy hoarfrost lasting most of day. Two observers in car, making numerous short walks into woods and around town. Total miles, 65 (5 on foot, 60 by car). Ruffed grouse, 6; pileated woodpecker, 1; hairy woodpecker, 3; downy woodpecker, 5; blue jay, 12; black-capped chickadee, 35; white-breasted nuthatch, 2; red-breasted nuthatch, 4; brown creeper, 2; starling, 16; English sparrow, 50+; evening grosbeak, 26; pine grosbeak, 4; common redpoll, 8; slate-colored junco, 3; Lapland longspur, 1. **Total,** 16 species; about 178 individuals. (Seen in area Dec. 31: golden eagle, 1; white-winged crossbill, 10.)—Harold R. Hanson, Stanton Oman.

264. Ames, Iowa (same area as in 1946 and 1947; woodland 70%, open pasture 30%).—Dec. 27; 8 a.m. to 5 p.m. Clear; temp. 27° to 34°; calm; 3-in. snow on ground. Four observers in 1 party for 6 hours, 2 parties for 2 hours. Total hours, 10 (9 on foot, 1 in car); total miles, 23 (15 on foot, 8 in car). Red-tailed hawk, 2; bob-white, 6; Wilson's snipe, 2 (seen in flight by 4 observers at 20 yds.); yellow-shafted flicker, 7; red-bellied woodpecker, 4; hairy woodpecker, 6; downy woodpecker, 4; blue jay, 11; Am. crow, 17; black-capped chickadee, 60; tufted titmouse, 1; white-breasted nuthatch, 19; brown creeper, 3; starling, 3; English sparrow, 37; cardinal, 2; Am. goldfinch, 6; slate-colored junco, 134; tree sparrow, 17. **Total,** 19 species; 341 individuals.—R. F. Trump, Dick Day, Jr., Jim Englehorn, Dick Fincham.

265. Cedar Falls, Iowa (Snag Creek, Union Bridge, Josh Higgins Park, Hartman Reserve; river bottoms 40%, upland forest 20%, savannas 30%, fields 10%).—Dec. 28; 8 a.m. to 12 m., 1 to 4 p.m. Cloudy 4 hours, drizzle 3 hours, snow 1 hour; temp. 32°; wind ESE, 5 m.p.h.; 1-2-in. snow on ground; water courses half frozen. One party, 4 in a.m., 4 in p.m., total 5 persons. Total hours, 8 (6½ on foot, 1½ in car), observer-hours 32; total miles, 47 (12 on foot, 35 by car). Mallard, 1; Cooper's hawk, 1; red-shouldered hawk, 2; rough-legged hawk, 1; barred owl, 3; yellow-shafted flicker, 7; red-bellied woodpecker, 3; hairy woodpecker, 3; downy woodpecker, 13; blue jay, 12; Am. crow, 50; black-capped chickadee, 25; tufted titmouse, 4; white-breasted nuthatch, 12; brown creeper, 11; robin, 1; eastern bluebird, 4; starling, 8; English sparrow, 250; cardinal, 9; purple finch, 3; Am. goldfinch, 4; slate-colored junco, 65; tree sparrow, 45; song sparrow, 3. **Total,** 25 species; 540 individuals.—Martin L. Grant, Mrs. Russell Rugg, Russell Hays, C. W. Robertson, Francis Crouter.

266. Davenport, Iowa (Duck Creek Park, along Locust St., Middle Road, and creek to Devils' Glen,

Credit Island and nearby shore area along Mississippi River and through fields to Fairmount Cemetery).—Dec. 25; 7:40 a.m. to 4:30 p.m. Clear; temp. 7° to 12°; some N and NE wind at times, 10-25 m.p.h.; about an inch of snow on ground in protected spots; some exposed areas clear of snow; creeks and ponds frozen; river at Credit Island open except near shore. Total miles, about 14 (on foot). Am. golden-eye, 85; Am. merganser, 7; red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 2; sparrow hawk, 1; herring gull, 5; yellow-shafted flicker, 2; red-bellied woodpecker, 1; hairy woodpecker, 3; downy woodpecker, 22; blue jay, 1; Am. crow, 3; black-capped chickadee, 23; tufted titmouse, 3; white-breasted nuthatch, 4; brown creeper, 5; starling, 17; English sparrow, 407; cardinal, 15; slate-colored junco, 109; tree sparrow, 36. **Total,** 22 species; 753 individuals.—C. F. Mueller.

267. Des Moines, Iowa (Fisher's Lake, Sycamore Park, Dove Woods, Pine Hill Cemetery, 28th St. Sanctuary, Impounding Reservoir, Walnut Woods State Park, Kinglet Woods, Chas. Sing Denman Woods, Ashworth Park, Crocker Woods, Wakonsa; open fields 25%, wooded streams 35%, lakeside 30%).—Dec. 26; 8 a.m. to 6 p.m. Clear; temp. 0° to 22°; wind SSE, 7 m.p.h. to SSW, 10 m.p.h.; ground covered with 2-in. snow; water frozen but some open water in Beaver and Walnut creeks and in Impounding Reservoir. Twenty observers in 5 parties. Total hours, 32 (27½ on foot, 4½ in cars); total miles, 122 (17 on foot, 105 in cars). Pied-billed grebe, 4; mallard, 4000 (est.); black duck, 25; pintail, 12; redhead, 25; ring-necked duck, 1; lesser scaup duck, 4; Am. golden-eye, 12; ruddy duck, 2; Am. merganser, 32; red-tailed hawk, 6; red-shouldered hawk, 2; rough-legged hawk, 1; marsh hawk, 1; sparrow hawk, 3; bob-white, 11; ring-necked pheasant, 1; Am. coot, 12; mourning dove, 2; barred owl, 4; saw-whet owl, 3; yellow-shafted flicker, 19; red-bellied woodpecker, 17; hairy woodpecker, 6; downy woodpecker, 67; blue jay, 55; Am. crow, 51; black-capped chickadee, 236; tufted titmouse, 37; white-breasted nuthatch, 32; brown creeper, 10; Carolina wren, 1; robin, 3; eastern bluebird, 6; golden-crowned kinglet, 1; cedar waxwing, 11; starling, 222 (200 est., 22); English sparrow, 500 (est.); meadowlark (sp.), 30; cardinal, 159; purple finch, 6; Am. goldfinch, 35; slate-colored junco, 373 (340 est., 33); tree sparrow, 615 (580 est., 35); song sparrow, 32. **Total,** 45 species; about 6687 individuals.—Helen Peasley, Gladys and Lester Haskell, Bruce Stiles, Toni Wendell.urg, Oliver Graves, Ruth Binsfeld, Mary Ellen and Dennis Warters, Joe K. Brown, J. P. Moore, Bradley McMain, Florence Chamberlain, Ruth Chapman, Dorothy Anderson, Woodward Brown, Olivia McCabe, Mrs. Tom Pettit, Elizabeth Peck, Lowell Chamberlain.

268. Dubuque, Iowa (Linwood and Mount Calvary cemeteries, Eagle Point Park, City Island, Mississippi River sloughs in Wisconsin; open fields 10%, pine woodland 15%, deciduous woodland 35%, river sloughs 40%).—Dec. 26; 8:30 a.m. to 4 p.m. Clear with bright sunshine; temp. –2° to 18°; wind, 15 m.p.h.; ground covered with 4-in. week-old snow; river open below dam. Three observers in 1 party. Total hours, 7½ (6 on foot, 1½ in car); total miles, 12 (7 on foot, 5 by car). Am. golden-eye, 4; Am. merganser, 3; red-tailed hawk, 2; rough-legged hawk, 1; bald eagle, 3; belted kingfisher, 2; red-bellied woodpecker, 3; red-headed woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 2; blue jay, 9; Am. crow, 5; black-capped chickadee, 19; tufted titmouse, 6; white-breasted nuthatch, 1; brown creeper, 2; golden-crowned kinglet, 1; cedar waxwing, 9; starling, 7; English sparrow, 141; cardinal, 3; purple finch, 1; pine siskin, 6; Am. goldfinch, 6; slate-colored junco, 14; tree sparrow, 38; song sparrow, 1. **Total,** 27 species; 291 individuals. (Seen in area Dec. 23, sparrow hawk, 1 by G.C.; Jan. 1, hooded merganser, 1; mallard, 1; pied-billed grebe, 1 by H.H.; purple grackle, 1 injured, J.A.D.)—George Crossley, Frieda Crossley, Howard Hintz (Dubuque Audubon Club).

269. Mount Vernon, Iowa (center of town south to Ivanhoe, southeast of Ivanhoe along Cedar River, Dark Hollow and Spring Hollow in Palisades-Kepler State Park; open farmland 20%, deciduous woodland 75%, town 5%).—Dec. 27; 7:30 a.m. to 12:15 p.m., 1:15 to 4 p.m. Cloudy; temp. 27° to 37°; wind W, 1-7 m.p.h.; 1-in. snow on ground; Cedar River frozen except at dam. Observers together. Total hours, 7½; total miles, 10. Red-breasted merganser, 5; Cooper's hawk, 1; bald eagle, 1 (adult carefully noted, second winter record); mourning dove, 13; belted kingfisher, 1; red-bellied woodpecker, 3; hairy woodpecker, 1; downy woodpecker, 6; blue jay, 10; Am. crow, 6; black-capped chickadee, 15; tufted titmouse, 3; white-breasted nuthatch, 10; brown creeper, 1; winter wren, 1; starling, 27; English sparrow, 73; cardinal, 25; Am. goldfinch, 40; slate-colored junco, 8; tree sparrow, 3. **Total,** 21 species; 253 individuals.—John C. W. Bliese, Chester W. Quimby, J. David Ennis, J. Harold Ennis.

270. Newton, Iowa (Westwood Park south along Cherry Creek to South Skunk River below Metz for 2 miles; open farmland 40%, timbered creek-bottom 20%, elm-timbered river bottom 40%).—Jan. 1; 7:30 a.m. to 5 p.m. Solid overcast; temp. 20° to 32°; wind WSW, 1-7 m.p.h.; ground mostly covered with 1-in. soft snow; all water frozen except short channels in Skunk River. Seven observers in 1 party. Total hours, 9; total miles, 22 (16 on foot, 6 by car). Red-tailed hawk, 1; red-shouldered

hawk, 1; broad-winged hawk [no details—Ed.], 1; marsh hawk, 2; bob-white, 10; ring-necked pheasant, 2; rock dove, 2 (living in a tree); yellow-shafted flicker, 11; red-bellied woodpecker, 4; hairy woodpecker, 8; downy woodpecker, 15; horned lark (prairie), 50; blue jay, 8; Am. crow, 12; black-capped chickadee, 20; tufted titmouse, 8; white-breasted nuthatch, 4; cedar waxwing, 10; starling, 6; English sparrow, 375; cardinal, 40; Am. goldfinch, 9; slate-colored junco, 325; tree sparrow, 475; Harris's sparrow, 2; song sparrow, 1. **Total,** 26 species; about 1402 individuals.—John Paul Moore, Bradley McMain, Ralph Agar, Jim Gaylor, Bob Little, Paul Casper, Konnie Yoshinaga.

271. Sioux City (Woodbury Co.), Iowa (Brower's Lake, Brown's Lake and Woods, State Park area adjoining Brown's Lake, wooded area south of Hover's Island, Morningside Nurseries, West Side hills, town area, Riverside Park and woods, confluence area of Big Sioux and Missouri rivers, Stone Park, Plum Creek Road, Talbot Road, and Logan Park; hilly deciduous woodland 50%, river and lake country and wooded lowlands 30%, open lowlands 10%, open hills 5%, town 5%).—Dec. 26; 7:30 a.m. to 5:45 p.m. Lightly overcast in morning, clear and bright in afternoon; temp. 0° to 22°; wind SE, 5-7 m.p.h.; ground covered with 8-10-in. packed, crusted snow with light snow on top of crust; Missouri River open in main channel, Big Sioux River open below Sioux City Gas Plant, lakes frozen. Eleven observers in 6 parties. Total hours afield, 48; total miles, 154 (128 by car, 26 on foot). Mallard, 152; Cooper's hawk, 1; red-tailed hawk, 1; rough-legged hawk, 1; prairie falcon, 1 (W.W.B.); horned owl, 1; short-eared owl, 1 (J.L., Z.C.L., B.N.); yellow-shafted flicker, 37; red-bellied woodpecker, 3; hairy woodpecker, 8; downy woodpecker, 24; blue jay, 6; Am. crow, 1587; black-capped chickadee, 47; white-breasted nuthatch, 20; brown creeper, 12; northern shrike, 2 (J.L.S.); starling, 61; English sparrow, 554; western meadowlark, 2; cardinal, 32; pine siskin, 12; spotted towhee, 1 (J.L.S.); slate-colored junco, 46; tree sparrow, 27; Harris's sparrow, 5 (W.W.B.). **Total,** 26 species; 2642 individuals.—Mr. and Mrs. Harrold Asmussen, W. W. Barrett, Mrs. E. A. Emery, Mr. and Mrs. Jean Laffoon, Zell C. Lee, Bob Nickolson, Dr. and Mrs. John L. Schott, Carl Wellhausen (Sioux City Bird Club).

272. Kansas City, Mo. and Kans. (Lake Quivira, Wyandotte Co. Lake, Swope Park, Briercliff, Parkville, and Clay Co.; deciduous woodland 45%, conifer groves 2%, weedy fields and thickets 28%, artificial lakes 25%).—Dec. 26; 7:30 to 4:30 p.m. Clear; temp. −5° to 24°; wind, less than 1 m.p.h.; 5-in. snow on ground; lakes ¾ frozen. Twenty-five observers in 5 parties. Total hours, 40 (30 on foot, 10 by car); total miles, 78 (33 on foot, 45 by car). Goose (sp.), 150; mallard, 10,500 (est.); black duck, 17; gadwall, 23; baldpate, 2; pintail, 30; green-winged teal, 1; shoveller, 9; lesser scaup duck, 6; Am. golden-eye, 34; Am. merganser, 400 (est.); sharp-shinned hawk, 1; red-tailed hawk, 7; red-shouldered hawk, 1; rough-legged hawk, 3; marsh hawk, 3; sparrow hawk, 7; bob-white, 15; Am. coot, 5; killdeer, 5; horned owl, 2; barred owl, 1; belted kingfisher, 3; yellow-shafted flicker, 28; red-bellied woodpecker, 18; hairy woodpecker, 9; downy woodpecker, 62; blue jay, 47; Am. crow, over 10,000 (est., coming into rookery); black-capped chickadee, 180 (est.); tufted titmouse, 150 (est.); white-breasted nuthatch, 11; brown creeper, 17; winter wren, 2; Carolina wren, 6; brown thrasher, 1; robin, 115 (est.); eastern bluebird, 90 (est.); golden-crowned kinglet, 1; cedar waxwing, 2; loggerhead shrike (migrant), 2; starling, 1275 (est.); English sparrow, 1275 (est.); myrtle warbler, 1; meadowlark (sp.), 12; red-wing, 150 (est.); purple grackle, 2; cardinal, 155 (est.); purple finch, 10; pine siskin, 4; Am. goldfinch, 170 (est.); eastern towhee, 2; spotted towhee, 14; slate-colored junco, 575 (est.); Oregon junco, 2 (dark cape, rusty sides, contoured breast markings); junco (sp.), 25; tree sparrow, 245 (est.); Harris's sparrow, 6; white-throated sparrow, 1; fox sparrow, 1; Lincoln's sparrow [no details—Ed.], 9; swamp sparrow, 4; song sparrow, 170 (est.); Lapland longspur, 1. **Total,** 63 species; about 26,073 individuals. (Seen in area Jan. 2: bald eagle, 2; yellow-bellied sapsucker, 1; Canada goose, 28; herring gull, 1.)—Rilla Hammat, Mrs. H. E. Schoen, Mabel James, Francis Rodgers, Treva Rogers, Jim Meyers, Mary Louise Meyers, Charles D. Newton, Earl T. Newton, Jr., Mr. and Mrs. Julian Evans, Curtis Stout, Keith Stout, Esther O'Connor, John Reid, John Bishop, Harold Hedges, Bill DeShazer, Robert Werning, Dr. Henry Harford, Irving Fay, Sylvia Fay, Margaret Diemers, Elizabeth and Dean Cole (Burroughs Nature Club).

273. Peruque (St. Charles Co.), Mo. (including Creve Coeur Lake, St. Louis Co., Mo.; Marais Temps Clair, Marais Croche, and Weber lakes, Peruque and surrounding Dardenne area in St. Charles Co., all near the confluence of the Missouri and Mississippi Rivers; deciduous woods 25%, farmland 15%, marshland 35%, water 25%).—Jan. 2; 7:30 a.m. to 5 p.m. Clear; temp. 30° to 45°; wind, SE, 4-17 m.p.h.; ground with some patches of snow, frozen in a.m. Eight observers in 3 parties. Total hours, 14 (on foot); total miles, 15 (on foot). White pelican, 1; mallard, 10,185 (10,000±1000, 185); pintail, 506; Am. golden-eye, 5; red-tailed hawk, 6; red-shouldered hawk, 2; rough-legged hawk, 5; bald eagle, 5; marsh hawk, 11; sparrow hawk, 19; bob-white, 39; herring gull, 42; ring-billed gull, 61; mourning dove, 9; yellow-shafted

flicker, 15; red-bellied woodpecker, 9; red-headed woodpecker, 3; downy woodpecker, 23; horned lark, 89 (northern, 1; prairie, 88); blue jay, 27; Am. crow, 1115; Carolina chickadee, 6; black-capped chickadee, 52; tufted titmouse, 25; white-breasted nuthatch, 6; brown creeper, 4; Carolina wren, 17; mockingbird, 2; robin, 9; eastern bluebird, 5; cedar waxwing, 5; loggerhead shrike, 4; starling, 2200; English sparrow, 82; European tree sparrow, 18; eastern meadowlark, 26; red-wing, 12; rusty blackbird, 18; purple grackle, 5; cardinal, 18; Am. goldfinch, 105; eastern towhee, 18; slate-colored junco, 220; tree sparrow, 392; field sparrow, 1; white-crowned sparrow, 47; white-throated sparrow, 17; fox sparrow, 33; swamp sparrow, 3; song sparrow, 9. **Total,** 53 species; about 15,578 individuals.—Alberta M. Bolinger, J. Earl Comfort, George Graff and Jr., Mildred Graff, Edward Hick, William N. Kelley and Jr. (St. Louis Audubon Society).

274. Ranken (St. Louis Co.), Mo. (tract between Valley Park and Eureka 6 miles long, 4 miles wide; deciduous woods on Ozark hillslopes 40%, open valleys bordering spring-fed creeks 40%, red cedar groves 8%, farmland 10%, water 2%).—Dec. 26; 7:30 a.m. to 3:30 p.m. Clear to very light clouds in p.m.; temp. 0° to 27°; wind 0-24 m.p.h., ground covered with 2-in. snow; creeks 40% open. Meramec River 70% open. Five observers in 2 parties. Total hours, 10 (on foot); total miles, 8¼ (on foot). Red-shouldered hawk, 1; sparrow hawk, 2; bob-white, 2; killdeer, 12; Wilson's snipe, 1; belted kingfisher, 4; yellow-shafted flicker, 7; pileated woodpecker, 2; red-bellied woodpecker, 11; red-headed woodpecker, 11; hairy woodpecker, 1; downy woodpecker, 7; blue jay, 9; Am. crow, 18; Carolina chickadee, 16; tufted titmouse, 25; white-breasted nuthatch, 2; brown creeper, 1; Carolina wren, 6; mockingbird, 2; robin, 4; eastern bluebird, 4; starling, 9; myrtle warbler, 3; English sparrow, 17; cardinal, 174; purple finch, 1; Am. goldfinch, 140; slate-colored junco, 166; tree sparrow, 43; field sparrow, 3; white-throated sparrow, 6; fox sparrow, 81; song sparrow, 11. **Total,** 34 species; 802 individuals.—Alberta M. Bolinger, J. Earl Comfort, J. Marshall Magner, Stuart L. O'Byrne, Jack Van Benthuysen (Webster Groves Nature Study Society).

275. Squaw Creek National Wildlife Refuge, Mound City, Mo. (thickets and flooded lowlands and fields).—Dec. 26; 12 m. to 4 p.m. Clear; temp. 25°; 5-in. snow on ground. Total hours, 4; total miles, 20 (15 by car, 5 by foot). Great blue heron, 1; Canada goose, 1200; mallard, 55,000; black duck, 30; gadwall, 2; pintail, 2; shoveller, 4; Am. merganser, 60; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 1; rough-legged hawk, 3; bald eagle, 4; marsh hawk, 14; ring-necked pheasant, 4; yellow-shafted flicker, 5; red-shafted flicker, 1; red-bellied woodpecker, 6; downy woodpecker, 1; horned lark, 2; Am. crow, 30; black-capped chickadee, 25; tufted titmouse, 12; starling, 2; English sparrow, 16; red-wing, 65; cardinal, 20; Am. goldfinch, 8; spotted towhee, 1; slate-colored junco, 30; tree sparrow, 100; white-crowned sparrow, 20; white-throated sparrow, 1; Lincoln's sparrow [no details—Ed.], 2; song sparrow, 40. **Total,** 36 species; about 56,718 individuals.—Lloyd F. Gunther.

276. Texarkana, Ark-Tex. (starting on the Arkansas side of the state line where it crosses Red River 7 miles north of city; most of route lay in Texas along Red River; farmland 25%, woodland 40%, pastures 25%, small lakes 10%).—Jan. 2; 7:30 a.m. to 4 p.m. Cloudy; temp. 43° to 62°; wind 1-7 m.p.h. Observers together. Total hours, 8½; total miles, 13 (on foot). Great blue heron, 14; mallard, 17; turkey vulture, 8; black vulture, 5; red-shouldered hawk, 1; Swainson's hawk, 1; marsh hawk, 3; sparrow hawk, 4; bob-white, 10; killdeer, 13; mourning dove, 2; belted kingfisher, 2; yellow-shafted flicker, 14; red-bellied woodpecker, 6; red-headed woodpecker, 2; hairy woodpecker, 2; downy woodpecker, 1; blue jay, 19; Am. crow, 33; chickadee (sp.), 4; tufted titmouse, 1; winter wren, 2; Bewick's wren, 1; mockingbird, 3; brown thrasher, 4; eastern bluebird, 5; loggerhead shrike, 4; starling, 734 (est.); myrtle warbler, 22; English sparrow, 15; meadowlark (sp.), 46; purple grackle, 808 (bronzed, 800—est.; purple, 8); brown-headed cowbird, 170; cardinal, 36; pine siskin, 8; Am. goldfinch, 41; slate-colored junco, 122; white-throated sparrow, 26; fox sparrow, 17; song sparrow, 1. **Total,** 40 species (1 additional subspecies); about 2227 individuals.—Charles Gardner, Travis Coulter.

277. St. Francisville, La. (south near Mississippi River to Port Hudson, pine forest east of town, lower end of Thompson Creek, east bank of False River to Grand Lake and north along Mississippi River levee to St. Francisville ferry; lake shore 25%, marsh 2%, deciduous bottomland 20%, hardwood upland 30%, pine forest 8%, open fields 15%).—Dec. 26; 12:01 a.m. to 6 p.m. Clear to moderately overcast; temp. 31° to 43°; wind NE, 3-17 m.p.h.; Fourteen observers in 6 parties. Total hours in daylight, 56 (45 on foot, 9 in car, 2 in rowboat); total hours in darkness, 8; total miles in daylight, 91 (37 on foot, 2 by boat, 55 by car); total miles in darkness, 12 (4 on foot, 38 by car). Loon (sp.), 1; horned grebe, 26; pied-billed grebe, 35; white pelican, 9; double-crested cormorant, 295; great blue heron, 8; mallard, 1; gadwall, 8; baldpate, 6; pintail, 15; redhead, 6; ring-necked duck, 34; canvas-back, 622; scaup duck (sp.), 237; Am. golden-eye, 6; buffle-head, 7; old-squaw, 9; ruddy duck,

714; turkey vulture, 15; black vulture, 77; sharp-shinned hawk, 2; Cooper's hawk, 2; red-tailed hawk, 10; red-shouldered hawk, 10; rough-legged hawk, 2; bald eagle, 6; sparrow hawk, 12; bob-white, 47; Am. coot, 613; killdeer, 209; Am. woodcock, 3; Wilson's snipe, 29; solitary sandpiper, 1; least sandpiper, 36; herring gull, 2; ring-billed gull, 21; Forster's tern, 33; mourning dove, 54; barn owl, 3; screech owl, 2; horned owl, 1; barred owl, 7; belted kingfisher, 15; yellow-shafted flicker, 111; pileated woodpecker, 6; red-bellied woodpecker, 96; red-headed woodpecker, 16; yellow-bellied sapsucker, 41; hairy woodpecker, 4; downy woodpecker, 38; eastern phoebe, 44; tree swallow, 5; rough-winged swallow, 12; blue jay, 119; Am. crow, 466; fish crow, 9; Carolina chickadee, 112; tufted titmouse, 55; brown creeper, 3; house wren, 11; winter wren, 13; Bewick's wren, 8; Carolina wren, 33; long-billed marsh wren, 2; short-billed marsh wren, 1; mockingbird, 190; brown thrasher, 86; robin, 404; hermit thrush, 70; eastern bluebird, 154; blue-gray gnatcatcher, 3; golden-crowned kinglet, 6; ruby-crowned kinglet, 244; Am. pipit, 83; cedar waxwing, 70; loggerhead shrike, 39; starling, 348; white-eyed vireo, 1; solitary vireo, 7; orange-crowned warbler, 22; myrtle warbler, 1064; pine warbler, 2; yellow-throat, 13; yellow-breasted chat, 1 (G.H.L.); English sparrow, 47; eastern meadowlark, 120; redwing, 2840; rusty blackbird, 6; Brewer's blackbird, 7; purple grackle, 139; brown-headed cowbird, 26; cardinal, 258; Am. goldfinch, 132; eastern towhee, 89; Savannah sparrow, 69; Leconte's sparrow, 2; vesper sparrow, 30; slate-colored junco, 212; chipping sparrow, 33; field sparrow, 113; white-throated sparrow, 873; fox sparrow, 27; swamp sparrow, 168; song sparrow, 25. **Total,** 104 species; 12,479 individuals.—Jas. Hy. Bruns, F. J. Buchmann, Robert and Juanita Krebs, Cyrus Larmoyeux, George H. Lowery, Jr., Robert and Mary Ann Moore, Robert J. and Marcella Newman, Albert and Christine Robinson, Charles R. Shaw, Herbert Stern.

278. Bismarck, N.Dak. (center of town to point 5 miles north along Missouri River bottomland; return through upland prairies; center of town to point 5 miles south; river-bottom timberland 40%, bottomland field edges 30%, upland prairies 20%, marsh 5%, urban 5%).—Dec. 26; 9:30 a.m. to 5 p.m. Clear; temp. –3° to 23°; wind 1-13 m.p.h.; ground covered with 4-in. snow. Three observers in 1 party. Total hours, 7 (4 on foot, 3 in car); total miles, 48 (4 on foot, 44 in car). Rough-legged hawk, 5; bald eagle, 2; ring-necked pheasant, 10; short-eared owl, 1; hairy woodpecker, 2; downy woodpecker, 3; horned lark, 8; Am. magpie, 4; black-capped chickadee, 34; white-breasted nuthatch, 4; northern shrike, 1; starling, 3; English sparrow, 79; redpoll, 2; pine siskin, 13; Am. goldfinch, 2; tree sparrow, 100 (est.). **Total,** 17 species; about 273 individuals. (Marsh hawk, 1 found which had been dead about 2 days.)—Mrs. R. N. Randall, R. N. Randall, R. L. Bagwell.

279. Des Lacs National Wildlife Refuge, Kenmare, N. Dak. (town of Kenmare to point 7 miles north, east shore of Middle and Lower Des Lacs lakes, Tasker's Coulee, and adjacent prairie; open fields 60%, wooded coulees and creek bottom 40%).—Dec. 26; 9 a.m. to 5 p.m. Clear; temp. 11° to 22°; wind NW, 25-30 m.p.h.; ground covered with 24-in. crusted snow. Four observers in 1 party. Total hours, 8 (5 on foot, 3 by car); total miles, 40 (8 on foot, 32 by car). Mallard, 7; rough-legged hawk, 1; sharp-tailed grouse, 24; European partridge, 9; ring-necked pheasant, 10; horned owl, 1; downy woodpecker, 1; Am. magpie, 10; black-capped chickadee, 2; starling, 24; English sparrow, 203; snow bunting, 1. **Total,** 12 species; 293 individuals. (Seen in area Dec. 25, Bohemian waxwing, 25; Jan. 2, robin, flock of 12.)—Mr. and Mrs. S. G. Morrau, Dr. and Mrs. R. T. Gammell.

280. Lower Souris National Wildlife Refuge, Upham (McHenry Co.), N.Dak. (refuge headquarters to Upham, east across marsh to river bottom between Dam I and Willow Creek; less coverage than most previous years because of heavy snows; marsh 33%, meadows 34%, wooded river bottom 33%).—Dec. 28; 9 a.m. to 5 p.m. Clear; temp. –6° to 14°; wind NW, 10 m.p.h.; snow averaged 22 in. Observers mostly together. Total hours, 8; total miles, 38 (8 on snowshoes, 30 by car). Sharp-tailed grouse, 42; European partridge, 39 (4 coveys of 12, 12, 10, and 5; ring-necked pheasant, 91; horned owl, 2; hairy woodpecker, 2; downy woodpecker, 3; Am. magpie, 8; black-capped chickadee, 18; white-breasted nuthatch, 2; brown creeper, 4; starling, 4; English sparrow, 93; redwing, 1; snow bunting, 199. **Total,** 14 species; 508 individuals.—C. J. Henry, Merrill Hammond, Grady Mann.

281. Canton, S.Dak. (center of city to 5 miles north, south, east, and west; home feeding station, Sioux River, Newton Hills, and farm areas; open farmland 45%, city and suburbs 15%, deciduous wooded areas 40%).—Jan. 2; 9 a.m. to 3 p.m. Clear; temp. 25° to 26°; wind 10 m.p.h.; ground covered with 12-in. crusted snow with deep banks and many bare spots; all water frozen except open spots in Sioux River. Total hours, 6 (on foot and in auto); total miles, 30. Ring-necked pheasant, 37; yellow-shafted flicker, 1; hairy woodpecker, 2; downy woodpecker, 3; blue jay, 3; Am. crow, 15; black-capped chickadee, 14; brown creeper, 1; starling, 35; meadowlark (sp.), 19; cardinal, 10; pine siskin, 50; slate-colored junco, 7. **Total,** 13 species; about 197 individuals.—W. B. Mallory.

282. Lacreek National Wildlife Refuge, Martin (Bennett Co.), S.Dak. (refuge headquarters north and east over trail to 10 spillway, south along east boundary and over dikes 6 and 8 to willow thickets, near south boundary, returning over west meadow trail; marsh and reservoir 50%, meadow 45%, willow thickets 5%) —Dec. 30; 8 a.m. to 4 p.m. Clear at start, becoming cloudy at 10 a.m., clearing again in mid-afternoon; temp. 16° to 20°; wind W to NW, 8-20 m.p.h.; snow averaging 3 in. deep; open water below spillways. Total hours, 8; total miles, 15 (13 by car, 2 on foot). Mallard, 18,000 (±800); Am. golden-eye, 12; Am. merganser, 2; rough-legged hawk, 18; golden eagle, 7; bald eagle, 2; marsh hawk, 15; sharp-tailed grouse, 1; ring-necked pheasant, 808; horned owl, 4; hairy woodpecker, 1; downy woodpecker, 3; Am. magpie, 4; Am. crow, 5; black-capped chickadee, 6; western meadowlark, 4; tree sparrow, 117 (50±5, 67). **Total,** 17 species; about 19,009 individuals.—Kenneth Krumm.

283. Sioux Falls, S.Dak. (circle of 7½ miles' radius about southeastern corner Section 2-101-49, on old Brandon Road; deciduous wooded valleys 75%, brushy drainage ditch and adjacent highways 15%, town parks, cemeteries, and suburbs 5%, open farmland 5%).—Dec. 26; 9 a.m. to 5 p.m. Clear; temp. 16° to 26° to 19°; wind S to SSW, 10-20 m.p.h.; ground covered with 1-6 in. crusted snow; ponds frozen but streams mainly open. Twenty-six observers in 5 parties. Total hours, 28½ (18½ on foot, 10 in autos); total miles, 141 (125 by auto, 16 on foot). Mallard, 2; red-tailed hawk, 2; rough-legged hawk, 6; marsh hawk, 3; peregrine falcon, 1; sparrow hawk, 4; ring-necked pheasant, 310 (200 est., 110); rock dove, 288 (250 est., 38; living in clefts and on ledges of abandoned quarry for years); mourning dove, 1; long-eared owl, 2; short-eared owl, 2; belted kingfisher, 1; yellow-shafted flicker, 12; hairy woodpecker, 14; downy woodpecker, 17; blue jay, 16; Am. magpie, 2 (F.H.); Am. crow, 107; black-capped chickadee, 214; white-breasted nuthatch, 19; red-breasted nuthatch, 3; brown creeper, 9; catbird, 1 (J.D.D.); robin, 1; northern shrike, 1; starling, 154; English sparrow, 254 (est.); western meadowlark, 2; cardinal, 5; Am. goldfinch, 26; slate-colored junco, 19; tree sparrow, 4. **Total,** 32 species; about 1502 individuals.—Douglas and Mrs. O. M. Anderson, Mrs. R. D. Burns, Mr. and Mrs. H. F. Chapman, Dr. and Mrs. John D. Donahoe, Iver Eide, Ray Elliott, Mr. and Mrs. J. S. Findley, Mrs. L. M. Fort, William Goebel, Mr. and Mrs. Geo. L. Goebel, Mr. and Mrs. Floyd Harriman, Mr. and Mrs. Chas. S. Hills, Mr. and Mrs. R. E. Powers, Chas. H. Rogge, Mr. and Mrs. T. M. Sheehan, John S. Tuthill, Ronald Vosacek (Sioux Falls Bird Club).

284. Wilmot, S.Dak. (east of town along county roads, with side excursions into creek beds, sloughs, etc. to Big Stone Lake, then north along lake shore to Sodak Bark).—Dec. 27; 9:30 a.m. to 5 p.m. Clear; temp. 12° at start, 10° upon return; wind, SW, light; very little snow. One observer afield 7 hours; 10 miles afoot. Ring-necked pheasant, 23; short-eared owl, 1; hairy woodpecker, 2; downy woodpecker, 5; horned lark, 6; Am. crow, 4; black-capped chickadee, 17; nuthatch (sp.), 5; brown creeper, 4; English sparrow, (no count made); red-winged, 1 (crippled wing); rusty blackbird, 2; tree sparrow, 6. **Total,** 14 species; 76+ individuals.—Bruce K. Harris.

285. Crete, Nebr. (wooded areas along creeks south of town, along flood plain of Big Blue River and prairies; creek bottoms 35%, flood plain 35%, prairies 29%, residential area 1%).—Dec. 26; 8 a.m. to 4:30 p.m. Clear; temp. 8° to 20°; wind E to SE, 10-15 m.p.h.; ground covered with 7-in. snow; 80% of river frozen. Two observers together 7 hours, 1 observer at feeding station 6 hours. Total party-hours, 13; total miles 10, (on foot). Cooper's hawk, 1; red-tailed hawk, 2; marsh hawk, 1; belted kingfisher, 1; yellow-shafted flicker, 6; red-bellied woodpecker, 4; red-headed woodpecker, 1; hairy woodpecker, 7; downy woodpecker, 5; horned lark, 50; blue jay, 5; Am. crow, 5; black-capped chickadee, 41; brown creeper, 1; English sparrow, 48; western meadowlark, 32; cardinal, 9; Am. goldfinch, 11; slate-colored junco, 40; chipping sparrow, 4; song sparrow, 7. **Total,** 21 species; 281 individuals.—A. Bromwell, J. L. C. Rapp, W. F. Rapp, Jr.

286. Dawson, Nebr. (Merle Draper farm 3 miles north, ½ mile west of Dawson, 5 miles south along hedgerows and easterly across country meeting at junction of U.S. Nos. 73 and 75 north of Dawson; slough south of Dawson near C.B.&Q. railroad, ½ mile; ¾ mile east and west from Nemaha River bridge south of Dawson; Humboldt town square and city park; Humboldt disposal grounds and Cooper Woodlands; to 3 miles east of Dawson; hedgerows and open fields 50%, grassy slough and river bank 10%, wooded parks and woodlands 40%).—Dec. 31; 8 to 11:30 a.m.; 12:30 to 4 p.m.; 4:30 to 5:15 p.m. Clear, partly cloudy in late afternoon; temp. 22° to 26°; wind NW, 15 m.p.h. at start, falling to 4 m.p.h. at noon, 0 at end; traces of snow; water mostly frozen. Seven observers in 2 parties. Total hours, 15½ on foot; total miles, 15. Red-tailed hawk, 6; Swainson's hawk, 2 [no details —Ed.]; marsh hawk, 2; Wilson's snipe, 1; mourning dove, 3; horned owl, 1; short-eared owl, 2; flicker (sp.), 7; red-bellied woodpecker, 6; hairy woodpecker, 4; downy woodpecker, 9; horned lark, 10; blue jay, 5; Am. crow, 80; black-capped chickadee, 86; tufted titmouse, 7; brown creeper, 2; robin, 35;

eastern bluebird, 9; starling, 96; English sparrow, 125; meadowlark (sp.), 10; cardinal, 96; pine siskin, 3; vesper sparrow, 6; junco (sp.), 27; tree sparrow, 33; field sparrow, 19; song sparrow, 7. **Total,** 29 species; 699 individuals.—Wendell H. Harmon, Mr. and Mrs. Merle Draper, Phyllis Parriott, Wesley Heim, Keith Heim, Willis Heim.

287. Fremont, Nebr. (Wild Court Park, Ridge Cemetery, country roads; deciduous and conifer woods 85%, fields 5%, country roads 10%).—Dec. 31; 8 a.m. to 3 p.m. Clear; temp. 15° to 35°; snow 3 to 5 inches in places, very little melting; wind S, mostly light. Total hours, 8 (on foot and in car); total miles, 15. Mallard, 6; screech owl, 1; yellow-shafted flicker, 3; red-bellied woodpecker, 1; hairy woodpecker, 4; downy woodpecker, 5; blue jay, 3; Am. crow, 50; black-capped chickadee, 30; white-breasted nuthatch, 3; brown creeper, 3; winter wren, 1; robin, 3; eastern bluebird, 5; cedar waxwing, 5; starling, 1; English sparrow, 100; purple grackle, 1; cardinal, 6; pine siskin, 2; Am. goldfinch, 6; slate-colored junco, 30; tree sparrow, 8. **Total,** 23 species; 277 individuals. (Before the storm, 2 western meadowlarks in field; flock of golden-crowned kinglets in a tree in yard.)—Lily Ruegg Button.

288. Grand Island, Nebr. (center of town to point 3 miles south and 2 miles west; Platte Deutsche Sandpit, cemetery, Wood River; deciduous area 25%, pine and deciduous area 40%, deciduous woodlands 30%, country roads 5%).—Dec. 31; 9:15 a.m. to 5:15 p.m. Fair; temp. 18° to 31°; wind NW, 0-1 m.p.h.; ground covered with 5-6-in. snow; all fresh water frozen. Observers together. Total hours, 7½ (on foot and in car); total miles, 11 (4 on foot, 7 in car). Rough-legged hawk, 1; sparrow, hawk, 1; bob-white, 1; ring-necked pheasant, 1; yellow-shafted flicker, 6; red-shafted flicker, 6; red-bellied woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 13; Am. magpie, 3; Am. crow, 9; black-capped chickadee, 49; white-breasted nuthatch, 1; brown creeper, 5; robin, 89; golden-crowned kinglet, 2; cedar waxwing, 77; starling, 84; English sparrow, 82; western meadowlark, 12; cardinal, 17; purple finch, 3; Am. goldfinch, 105; slate-colored junco, 36; tree sparrow, 2; Harris's sparrow, 1; song sparrow, 1. **Total,** 27 species; 610 individuals. (Seen in area Dec. 18: Cooper's hawk, 1; marsh hawk, 1; long-eared owl, 1; purple grackle [bronzed], 3; pine siskin, 5.)—Ethel M. Houser, Verneil E. Griffin.

289. Hastings, Nebr. (center of town to point 8 miles south; Crystal Lake area along the Little Blue River and adjoining fields; center of town to point 5 miles northeast and over adjoining open country for about 5 miles; farmland 50%, shelter belts and woodland 50%).—Jan. 1; 8 a.m. to 4 p.m. Clear; temp. 26° to 38°; wind S, 5 m.p.h.; ground covered with uneven snow up to depth of several feet; some open water along river, ponds frozen. Seven observers in 3 parties. Total hours, 10 (7 on foot). Mallard, 1; shoveller, 1; marsh hawk, 3; sparrow hawk, 2; ring-necked pheasant, 3; horned owl, 2; belted kingfisher, 1; yellow-shafted flicker, 2; red-shafted flicker, 6; red-bellied woodpecker, 2; hairy woodpecker, 4; downy woodpecker, 8; horned lark, 40; Am. magpie, 1; Am. crow, 8; black-capped chickadee, 12; white-breasted nuthatch, 6; red-breasted nuthatch, 2; brown creeper, 1; robin, 1; starling, 50; English sparrow, 75; meadowlark (sp.), 55; red-wing, 1; cardinal, 11; Am. goldfinch, 10; slate-colored junco, 50; tree sparrow, 75; Harris's sparrow, 2; song sparrow, 3. **Total,** 30 species; 438 individuals.— W. E. Eigsti, David Eigsti, Burton Nelson, Mrs. A. M. Jones, Vera Maunder, Geraldine Heartwell, Mr. and Mrs. R. A. Watson, Mrs. A. H. Jones, Mrs. C. E. Ruch, Mrs. A. M. Brooking (Brooking Bird Club).

290. Kearney, Nebr. (from Platte River bridge, Highway 10, center of the "Great Bend" area, through Blacks Woods area to 1733 Ranch; open farm and prairie country 50%, river area 30%, wooded area 20%).—Dec. 26, 8 a.m. to 5:30 p.m. Sunny; temp. 9° to 12°; wind SSE, 5 m.p.h.; 4-6-in. snow. Total hours, 9½; total miles, 12 (on foot). Pintail, 7; mallard, 11; Am. merganser, 3; Swainson's hawk, 1 [no details—Ed.]; marsh hawk, 2; sparrow hawk, 3; bob-white, 59 (definitely on the increase); ring-necked pheasant, 7; screech owl, 1; horned owl, 3; red-shafted flicker, 3; hairy woodpecker, 6; downy woodpecker, 3; horned lark, 572; Am. magpie, 7; Am. crow, 9; black-capped chickadee, 9; brown creeper, 2; robin, 3; Townsend's solitaire, 7; starling, 163; English sparrow, 271; purple grackle, 22; cardinal, 2; Am. goldfinch, 31; junco (sp.), 39; tree sparrow, 6; Harris's sparrow, 9; song sparrow, 1. **Total,** 30 species; 1291 individuals.—Mr. and Mrs. Eddie Brown.

291. Lincoln, Nebr. (intersection Cotner Blvd. and Adams Street road, east 3 miles to Stevens' Creek bridge; north along Stevens' Creek on Kinny farm to Rock Island railroad bridge and return to road bridge; thence to Copple farm south of Holdridge Street road; then to Havelock Fairview Cemetery on Adams Street road and adjacent field shelterbelt; then to starting point on Cotner Blvd.; grassy roadsides bordered by native shrubs and trees and farmstead windbreaks 15%, mixed deciduous woodland [10% grazed] 73%, stream 5%, coniferous plantings [cemetery] 2%, mixed deciduous-coniferous field shelterbelt 5%).—Jan. 1; 8:30 a.m. to 4:30 p.m. Cloudy, sun appearing for a few

minutes at 2:30 p.m. and again for a short period at 3 p.m.; temp. 18° to 26°; wind SE, 15-20 m.p.h. at start, falling to 0 at end; undisturbed 4-in. snow, with some wind-blown bare spots in open fields; light snowfall from 10:50 a.m. to 12:30 p.m.; Stevens' Creek mostly frozen. One observer afoot until 10 a.m., 2 together until 12 m., 1 until 1:30 p.m., 4 together thereafter. Total hours, 8 (7 on foot, 1 in car); total miles, 17 (7 on foot, 10 in car). Sparrow hawk, 1; mourning dove, 5; horned owl, 1; yellow-shafted flicker, 1; red-bellied woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 10; Am. crow, 21; black-capped chickadee, 42; tufted titmouse, 4; brown creeper, 6; robin, 8; northern shrike, 1; starling, 34; English sparrow, 222; western meadowlark, 14; cardinal, 11; Am. goldfinch, 3; spotted towhee, 1; junco (sp.), 67; tree sparrow, 7; Harris's sparrow, 4; song sparrow, 3. **Total,** 23 species; 469 individuals. (Two blue jays seen at Mrs. O. E. Jerner's feed station Dec. 31.)—Adrian C. Fox, Mrs. Dwight P. Thomas, Mrs. Loren Mills, Mrs. O. E. Jerner (University Place Bird Club).

292. Nebraska National Forest, Bessey Division (Thomas Co.), Nebr. (both south and north sides of Forest Nursery, up Middle Loup River to brush and trees east of Besley ranch, southwest to 1940 burnt area, east to fire break, and northeast to nursery; pine woodland 70%, meadow 20%, brush 10%).—Jan. 1; 8:30 a.m. to 4 p.m. Cloudy; temp. 22° to 32°; wind W, 1-5 m.p.h.; 14-in. snow. Total hours, 7½; total miles, 8 (on foot). Mallard, 2; sharp-shinned hawk, 1; ring-necked pheasant, 14; sharp-tailed grouse, 30; bob-white, 20; horned owl, 1; red-shafted flicker, 4; hairy woodpecker, 2; Am. crow, 18; Am. magpie, 5; black-capped chickadee, 6; robin, 33; Townsend's solitaire, 8; eastern bluebird, 3; Bohemian waxwing, 34; Am. goldfinch, 4; junco (sp.), 64; tree sparrow, 66. **Total,** 18 species; 315 individuals.—Carl E. Smith.

293. North Platte, Nebr. (radius of 7½ miles from post office; woodlots at University Experimental Station, wooded bottomland along North and South Platte rivers, adjacent fields and roadsides; wooded bottomland 75%, farmland 10%, grassland 10%, farm woodlots 5%).—Dec. 26; dawn to dusk. Fair; temp. 4° to 23°; wind WSW, 6-12 m.p.h.; ground covered with 4-in. snow; river channels open, ponds frozen. Four observers in 3 parties. Total hours, 12 (8 on foot, 4 in car); total miles, 50 (8 on foot, 42 in car). Mallard, 103; sharp-shinned hawk, 1; rough-legged hawk, 11; marsh hawk, 3; sparrow hawk, 1; bob-white, 54; ring-necked pheasant, 34; ring-billed gull, 1; horned owl, 2; belted kingfisher, 2; yellow-shafted flicker, 9; red-shafted flicker, 3; hairy woodpecker, 3; downy woodpecker, 6; horned lark, 1; Am. magpie, 30; Am. crow, 7; black-capped chickadee, 13; robin, 1; northern shrike, 2; starling, 311; English sparrow, 12; meadowlark (sp.), 20; red-wing, 25; rusty blackbird, 24; Brewer's blackbird, 28; cardinal, 5; pine siskin, 1; Am. goldfinch, 69; slate-colored junco, 50; Oregon junco, 38; tree sparrow, 413; song sparrow, 1. **Total,** 33 species; 1284 individuals.—Mr. and Mrs. Glenn Viehmeyer, Wilson Tout, A. Collister (North Platte Bird Club).

294. Omaha, Nebr. (Fontenelle Forest, a stretch of deciduous wooded bluffs and bottomland with swamp and cottonwood and willow growth, along Missouri River, about 2 miles south of Omaha outskirts 55%. Forest Lawn Cemetery just northwest of city limits with hills, artificial ponds, and natural stream 25%, suburban residence district western edge of town 10%, Lake Manawa across Missouri River in Iowa 10%).—Jan. 1; 7:30 a.m. to 4:20 p.m. Cloudy; temp. 18° to 29°; wind SE, 10-15 m.p.h.; ground covered with 3-5-in. crusted snow; river level low, with ice flows, not much open water. Four observers in 3 parties. Total hours, 12 (on foot); total miles, 10. Mallard, 47; Am. merganser, 2; red-breasted merganser, 14; red-shouldered hawk, 1; sparrow hawk, 1; horned owl, 1; yellow-shafted flicker, 2; red-bellied woodpecker, 3; hairy woodpecker, 1; downy woodpecker, 13; blue jay, 8; Am. crow, 81; black-capped chickadee, 40; tufted titmouse, 4; white-breasted nuthatch, 8; brown creeper, 1; brown thrasher, 1 (R.A.M.); robin, 187; eastern bluebird, 6; starling, 2; purple grackle (bronzed), 4; English sparrow, 20; cardinal, 18; Am. goldfinch, 4; pine siskin, 8; slate-colored junco, 30; tree sparrow, 30; song sparrow, 4. **Total,** 28 species; 541 individuals.—Wade Vogel, Joe Armstrong, Dr. R. Allyn Moser, Mary Ellsworth.

295. Weeping Water, Nebr. (town to point 6 miles southeast; open farmland 50%, town suburbs 10%, grove along creek 20%, our yard and feeding stations 20%).—Dec. 31; 8 a.m. to 3 p.m. Clear; temp. 12° to 29°; wind 1-7 m.p.h. Total hours, 14; total miles, 15 (10 in car, 5 on foot). Ring-necked pheasant, 1; yellow-shafted flicker, 1; hairy woodpecker, 2; downy woodpecker, 3; horned lark, 4; Am. crow, 10; black-capped chickadee, 8; starling, 1; English sparrow, 151; western meadowlark, 14; slate-colored junco, 12; cardinal, 6. **Total,** 12 species; 213 individuals.—Mr. and Mrs. Ray E. Norris.

296. Wisner, Nebr. (1 mile north of highway No. 275, and ½ mile east of county line between Cuming and Stanton counties (highway No. 15), southward to 1 mile south of highway No. 275; down highway No. 275 into Wisner; farm building sights including coniferous and deciduous trees and shrubbery 75%, open farmland and highways 25%).—Jan. 2; 9:15 a.m. to 4:30 p.m. Overcast;

heavy frost leaving by 1 p.m.; temp. 26° to 28°; wind SW, 0-5 m.p.h.; ground completely covered with 4-10-in. crusted snow with many deep drifts. Observers together. Total hours, 7¼ (6½ on foot, ¾ in car); total miles, 12 (2 on foot, 10 in car). Cooper's hawk, 2; bob-white, 10; ring-necked pheasant, 70; greater prairie chicken, 4; yellow-shafted flicker, 5; hairy woodpecker, 1; downy woodpecker, 3; blue jay, 2; Am. crow, 9; black-capped chickadee, 4; starling, 84; English sparrow, 229; meadowlark (sp.), 4; cardinal, 4; slate-colored junco, 12; tree sparrow, 8. **Total,** 16 species; 451 individuals.—Mr. and Mrs. John Lueshen.

297. Baldwin, Kans. (south edge of town to point 13 miles northwest, Lone Star Lake; open farmland 20%, town suburbs 20%, deciduous farm woodlots 40%, lake shore 20%).—Dec. 27; 7:30 a.m. to 4:45 p.m. Cloudy; temp. 29° to 34°; wind SSW, 1-2 m.p.h.; water frozen except scattered open spots along edges of Lone Star Lake. Ten observers in 2 parties. Total hours, 45 (22 on foot, 23 by car); total miles, 79 (19 on foot, 60 by car). Cooper's hawk, 1; red-tailed hawk, 14; Harlan's hawk, 2; marsh hawk, 15; sparrow hawk, 7; bob-white, 25; mourning dove, 9; horned owl, 1; barred owl, 3; yellow-shafed flicker, 23; red-shafted flicker, 1; red-bellied woodpecker, 16; red-headed woodpecker, 1; yellow-bellied sapsucker, 5; hairy woodpecker, 3; downy woodpecker, 21; horned lark, 55; blue jay, 34; Am. crow, 92; black-capped chickadee, 54; tufted titmouse, 45; white-breasted nuthatch, 3; brown creeper, 3; winter wren, 1; Bewick's wren, 1; Carolina wren, 5; mockingbird, 4; robin, 109; eastern bluebird, 19; golden-crowned kinglet, 2; cedar waxwing, 2; loggerhead shrike, 2; starling, 192; English sparrow, 317; eastern meadowlark, 126; purple grackle (bronzed), 1; cardinal, 89; purple finch, 9; Am. goldfinch, 13; spotted towhee, 14; slate-colored junco, 350; tree sparrow, 113; field sparrow, 1; Harris's sparrow, 78; white-crowned sparrow, 8; song sparrow, 53. **Total,** 46 species; 1942 individuals. (Seen in area Dec. 26: myrtle warbler, 2; fox sparrow, 1.)—Amelia Betts, Mrs. Geo. Boicourt, Mr. and Mrs. Ivan L. Boyd, Arthur Bridwell, Phoebe Emery, Mr. and Mrs. T. A. Evans, Katharine Kelley, R. F. Miller (Baldwin Bird Club).

298. Lawrence, Kans. (within a 7½-mile radius from center of town; open farmland 70%, roadside fence rows 10%, deciduous woodland 10%, river 5%, marsh 3%, urban areas 2%).—Dec. 30; 7:30 a.m. to 5:10 p.m. Clear; temp. 12° to 35° to 30°; no wind; snow in sheltered places 1-2 inches; all fresh water frozen except Kansas River. Four observers in 1 party. Total hours, 9⅔; total miles, 93 (88 by car, 5 on foot). Mallard, 6; pintail, 1; Am. golden-eye, 14; sharp-shinned hawk, 1; red-tailed hawk, 19; rough-legged hawk, 1; marsh hawk, 13; sparrow hawk, 7; bob-white, 18; mourning dove, 2; horned owl, 2; yellow-shafted flicker, 63; red-bellied woodpecker, 8; red-headed woodpecker, 1; hairy woodpecker, 2; downy woodpecker, 10; horned lark, 8; blue jay, 6; Am. crow, 99; black-capped chickadee, 90; tufted titmouse, 6; brown creeper, 1; Carolina wren, 3; robin, 125; eastern bluebird, 22; loggerhead shrike, 1; starling, 508 (400±50, 108); English sparrow, 82; eastern meadowlark, 48; red-wing, 4; cardinal, 59; purple finch, 1; Am. goldfinch, 18; spotted towhee, 3; slate-colored junco, 148; tree sparrow, 305 (±25); Harris's sparrow, 39; white-crowned sparrow, 9; song sparrow, 29. **Total,** 39 species; 1782 individuals.—Charles G. Sibley, M. Dale Arvey, James W. Bee, Henry S. Fitch (Mus. Nat. Hist., Univ. of Kansas).

299. Topeka, Kans. (Washburn Univ. campus, Gage Park, Edgewood Park, Security Benefit Hospital northwest to old brickyard, west along Kaw River, south to Highway 10, west to Hunt Club, east 1½ miles to lakes, south to Huntoon Road, east 2 miles to Gage St., south 3 miles, east to Shawnee Lake, highways west of Burnett's Mound, Deer Creek from camp grounds to Shawnee Lake, Berryton north to lake, Shawnee Lake area; open farmland 50%, lake shore 25%, deciduous woods 15%, evergreens 3%, weedy ravines 7%).—Jan. 2; 8 a.m. to 5:30 p.m. Clear to partly overcast; temp. 25° to 50° to 36°; wind ESE, 1-7 m.p.h.; ground covered by ½-in. snow in morning, all melted during day except in sheltered areas; water frozen on creeks and ponds, river open, about 50 acres open water on lake. Nineteen observers in 7 parties. Total hours, 96 (42 on foot, 54 in cars); total miles, 108 (35 on foot, 73 by car). Canada goose, 3 (lesser Canada, 2; Hutchins's, 1—all standing on ice surrounded by mallards, comparison in size checked through 20X scope—8 observers); mallard, 1624; pintail, 2; shoveller, 4; redhead, 5; ring-necked duck, 1; canvas-back, 1; greater scaup duck, 2; lesser scaup duck, 5; hooded merganser, 2; Am. merganser, 57; red-tailed hawk, 2; marsh hawk, 10; sparrow hawk, 4; bob-white, 11; Am. coot, 3; mournning dove, 6; horned owl, 4; belted kingfisher, 1; yellow-shafted flicker, 16; red-shafted flicker, 1; red-bellied woodpecker, 4; hairy woodpecker, 2; downy woodpecker, 17; horned lark, 4; blue jay, 24; Am. crow, 60; black-capped chickadee, 56; tufted titmouse, 9; red-breasted nuthatch, 1; brown creeper, 7; winter wren, 1; mockingbird, 1; robin, 329; eastern bluebird, 8; Townsend's solitaire, 1; starling, 136; English sparrow, 473; eastern meadowlark, 26; western meadowlark, 10; cardinal, 78; Am. goldfinch, 27; eastern towhee, 1; spotted towhee, 4; slate-colored junco, 62; Oregon junco (pink-sided), 1 (5 observers); tree sparrow, 75; field sparrow, 5; Harris's sparrow, 29; white-crowned sparrow, 2; fox sparrow, 2; song sparrow, 11; Lapland longspur, 76. **Total,** 53 species (1 additional

subspecies); 3306 individuals. (Seen in area Dec. 30: pied-billed grebe, 2; black duck, 3; **ruddy duck, 5;** herring gull, 3; barred owl, 1; yellow-bellied sapsucker, 1; purple finch, 1.)—Mr. and Mrs. Henry Blake, Mr. and Mrs. Charles H. Martin, Mrs. Walter A. Huxman, Clyde Morris, Dale Morris, Esther Mawhirter, Roberta Foote, Grace Holcombe, Mary J. Leake, Elizabeth Fisher, Ruwal Freeze, Dan Noe, Gerald Sawyer, Phil Menninger, E. Maurice Nuss, T. W. Nelson, L. B. Carson (Topeka Audubon Society).

300. Wichita, Kans. (Santa Fe and Crestview Lakes, woods along Whitewater River and Whitewater Creek, Maple Grove Cemetery, Oak and Sims Park, Big Slough; lake 10%, deciduous woodlots 65%, slough and marsh land 5%, brushland 10%, open fields 10%).—Dec. 27; dawn to dusk. Completely overcast; temp. 30° to 36°; wind S, 8-12 m.p.h.; river, creek, and lake partially frozen. Total hours, 11 (9 on foot, 2 by car); total miles, 81 (14 on foot, 67 by car). Canada goose, 4; mallard, 4000 (est.); pintail, 1; sharp-shinned hawk, 1; red-tailed hawk, 1; marsh hawk, 12; sparrow hawk, 4; bob-white, 9; mourning dove, 5; horned owl, 4; yellow-shafted flicker, 10; red-shafted flicker, 1; red-bellied woodpecker, 6; hairy woodpecker, 2; downy woodpecker, 17; horned lark, 1500 (est.); blue jay, 5; Am. crow, 214; black-capped chickadee, 79; tufted titmouse, 15; white-breasted nuthatch, 1; brown creeper, 14; winter wren, 1; mockingbird, 1; robin, 1; golden-crowned kinglet, 17; loggerhead shrike, 3; starling, 430; English sparrow, 400; eastern and western meadowlarks, 18; cardinal, 21; Am. goldfinch, 1; spotted towhee, 16; slate-colored junco, 83; tree sparrow, 96; Harris's sparrow, 49; song sparrow, 11; Lapland Longspur, 500 (est.). **Total,** 38 species; about 7573 individuals.—Loren Keller, Harry L. Hobson.

301. Durant, Okla. (city park, Southeastern State College campus, adjacent residential areas, north from college to Chuckwa Creek, Hickory Hollow Rod and Gun Club, State Fish Hatchery, roads to and from gun club and hatchery; roadsides of open farmland 5%, pastured woodland 40%, fish hatchery 45%, residential area including campus 10%).—Dec. 28; 7:15 a.m. to 5:30 p.m. Continuously overcast until half hour before sunset; intermittent mist and rain until 4 p.m.; temp. 50° to 56°; wind S to SW, 0-15 m.p.h. Four observers in 1 party. Total hours, 7½ (6¾ on foot, ¾ by car); total miles, 34 (12 on foot, 20 by car). Pied-billed grebe, 7; great blue heron, 1; mallard, 900 (est.); gadwall, 4; baldpate, 14; pintail, 500 (est.); blue-winged teal, 100 (est.); shoveller, 5; redhead, 2; ring-necked duck, 80 (est.); canvas-back, 40; lesser scaup duck, 35; buffle-head, 2; marsh hawk, **2; sparrow hawk, 1; Am.** coot, 1000 (est.); killdeer, 6; Wilson's snipe, 2; mourning dove, 15; belted kingfisher, 1; yellow-shafted flicker, 10; flicker (sp.), 6; red-bellied woodpecker, 4; red-headed woodpecker, 5; downy woodpecker, 3; blue jay, 36; Am. crow, 89; Carolina chickadee, 11; tufted titmouse, 8; Carolina wren, 3; mockingbird, 5; robin, 6; eastern bluebird, 7; ruby-crowned kinglet, 1; shrike (sp.), 3; starling, 52; English sparrow, 100; meadowlark (sp.), 33; red-wing, 49; blackbird (sp.), 3,000,000 (est.); purple grackle, 11; cardinal, 16; Am. goldfinch, 9; slate-colored junco, 110; field sparrow, 2; Harris's sparrow, 5; white-crowned sparrow, 3; white-throated sparrow, 10; fox sparrow, 2; song sparrow, 10. **Total,** 48 species; about 3,003,326 individuals. (Seen in same area, Jan. 1, yellow-bellied sapsucker, 1; hairy woodpecker, 1; brown creeper, 1; myrtle warbler, 3; Jan. 2, bob-white, 10.)—Wayne H. Silver, Dorothy S. Silver, Edith Pool, Sam Pool.

302. Oklahoma City, Okla. (vicinity of Lake Overholser, starting at 39th St. Bridge and working around lake; cattail marsh and lake shore 75%, deciduous woods and river bank 25%).—Dec. 29; dawn to dusk. Clear; temp. 28° to 40°; wind, 35 m.p.h. Five observers together. Total hours, 11 (5 by car, 6 on foot); total miles, 22 (17 by car, 5 on foot). Mallard, 1664 (1500 est., 164); pintail, 30; redhead, 26; canvas-back, 12; Am. merganser, 230; buffle-head, 1; marsh hawk, 22; sparrow hawk, 1; bob-white, 16; Am. coot, 5; killdeer, 1; Wilson's snipe, 1; herring gull, 1; ring-billed gull, 211; horned owl, 1; robin, 90; belted kingfisher, 1; red-shafted flicker, 7; red-bellied woodpecker, 6; red-headed woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 2; Am. crow, 115; Carolina chickadee, 22; tufted titmouse, 7; mockingbird, 1; eastern bluebird, 41; mountain bluebird, 1 (pale blue breast plainly seen—P.G., D.A.G.); loggerhead shrike, 1; starling, 133; Am. goldfinch, 84; English sparrow, 56; western meadowlark, 53; red-wing, 5000 (est.); cardinal, 21; spotted towhee, 10; Savannah sparrow, 3; slate-colored junco, 14; tree sparrow, 14; field sparrow, 1; Harris's sparrow, 55; white-crowned sparrow, 2; song sparrow, 3. **Total,** 43 species; about 7968 individuals.—James Carr, T. H. Milby, Phillip Griffing, Harry E. Turner, Dan A. Gardner.

303. Salt Plains National Wildfire Refuge, Jet, Okla. (dam spillway and Salt Fork River, east side of lake north to fish hatchery, south side of lake west to White residence; lake 50%, adjacent agricultural land 10%, roadsides 10%, deciduous woodland 30%).—Dec. 31; 7 a.m. to 6 p.m. Partly cloudy; temp. 23° to 41°; wind NW, 0-4 m.p.h.; coves and north end of lake and all small ponds

frozen. Total miles, 35 (5 on foot, 30 by car). Canada goose, 5780 (est.); snow goose, 1; mallard, 4050 (est.); black duck, 1; pintail, 17; shoveller, 4; Am. golden-eye, 30; buffle-head, 4; Am. merganser, 900 (est.); red-tailed hawk, 4; rough-legged hawk, 2; golden and bald eagles, 7; marsh hawk, 26; sparrow hawk, 1; bob-white, 2; ring-necked pheasant, 1; greater yellow-legs, 14; herring gull, 14; ring-billed gull, 1200 (est.); mourning dove, 15; horned owl, 2; belted kingfisher, 1; yellow-shafted flicker, 3; red-shafted flicker, 14; red-bellied woodpecker, 4; hairy woodpecker, 2; downy woodpecker, 3; Am. crow, 54; chickadee (sp.), 17; tufted titmouse, 6; brown creeper, 4; Carolina wren, 3; rock wren, 1 (observed in good light among rocks of drainage ditch for extended period on 3 successive days); eastern bluebird, 4; starling, 75; English sparrow, 7; eastern and western meadowlarks, 65; red-wing, 1; cardinal, 14; Am. goldfinch, 5; spotted towhee, 12; slate-colored junco, 6; tree sparrow, 70; field sparrow, 46; Harris's sparrow, 75 (est.); white-crowned sparrow, 16; song sparrow, 40. **Total,** 49 species; about 12,623 individuals.—Ivan L. Ophel, Robert M. Jenkins.

304. Stillwater, Okla. (Boomer Lake, Fair Park, Agronomy Farm, Lake Carl Blackwell; lake shore 25%, timbered streams 25%, timbered ravine 25%, cultivated fields and pastures 25%).—Dec. 26; 8 a.m. to 6 p.m. Cloudy; temp. 26° to 36°; wind SE, 1-7 m.p.h.; film of ice along lake shore and pond margins. Five observers working singly or together. Total hours, 42 (27 on foot, 15 by car); total miles, 90 (70 by car, 20 on foot). Great blue heron, 4; mallard, 700 (est.); gadwall, 18; green-winged teal, 25; Am. merganser, 54; unidentified ducks, 100; Cooper's hawk, 1; red-tailed hawk, 5; marsh hawk, 1; bob-white, 13; ring-billed or herring gull, 1; mourning dove, 18; barred owl, 1; yellow-shafted flicker, 18; red-shafted flicker, 3; red-bellied woodpecker, 4; red-headed woodpecker, 2; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 6; horned lark, 3; blue jay, 7; Am. crow, 65; Carolina chickadee, 30; tufted titmouse, 9; white-breasted nuthatch, 1; brown creeper, 1; winter wren, 1; Bewick's wren, 6; Carolina wren, 3; robin, 585; eastern bluebird, 34; migrant shrike, 5; starling, 1; English sparrow, 125; meadowlark (both eastern and western), 400; red-wing, 42; cardinal, 35; purple finch, 30; pine siskin, 6; eastern goldfinch, 142; spotted towhee, 1; Savannah sparrow, 1; Leconte's sparrow, 2; slate-colored junco, 118; tree sparrow, 157; field sparrow, 1; Harris's sparrow, 108; fox sparrow, 1; Lincoln's sparrow, 4; song sparrow, 34. **Total,** 51 species; about 2934 individuals.—A. M. Baumgartner, F. M. Baumgartner, William Frank, James Lindzey, Walter P. Taylor (Oklahoma A. and M. College Cooperative Wildlife Research Unit).

305. Tulsa, Okla. (Mohawk Park—same area as covered in 1947 bird count; city reservoirs, recreation lake, and lagoon 25%; hackberry, elm, oak, flood-plains 40%, areas devoted to park use 20%, cultivated fields and hay meadows 15%).— Dec. 26; 5:30 a.m. to 4:15 p.m. Overcast, temp. 20° to 34° to 33°; wind S, 0-14 m.p.h.; snow flurries from 10 a.m. to 2 p.m.; shallow pools frozen. Nineteen observers in 7 parties. Total hours, 27 (26 on foot, 1 in car); total miles, 32 (21 on foot, 11 by car). Pied-billed grebe, 1; great blue heron, 15; mallard, 6377 (6000±1000, 377); black duck, 3; baldpate, 4; pintail, 12; green-winged teal, 6; redhead, 13; ring-necked duck, 21; lesser scaup duck, 2; Am. golden-eye, 6; Am. merganser, 1500 (±200); hooded merganser, 1; red-tailed hawk, 5; Harlan's hawk, 1; red-shouldered hawk, 6; marsh hawk, 4; sparrow hawk, 4; bob-white, 9; ring-necked pheasant, 1; herring gull, 2; ring-billed gull, 42; horned owl, 2; barred owl, 1; belted kingfisher, 1; yellow-shafted flicker, 20; red-shafter flicker, 1; pileated woodpecker, 1; red-bellied woodpecker, 24; red-headed woodpecker, 25; yellow-bellied sapsucker, 1; hairy woodpecker, 12; downy woodpecker, 17; blue jay, 47; Am. crow, 74; chickadee (sp.), 74; tufted titmouse, 125; white-breasted nuthatch, 5; brown creeper, 6; winter wren, 1; Carolina wren, 7; mockingbird, 11; brown thrasher, 8; robin, 52; hermit thrush, 1; eastern bluebird, 45; golden-crowned kinglet, 1; ruby-crowned kinglet, 2; loggerhead shrike, 1; starling, 43; English sparrow, 197; eastern meadowlark, 103; red-wing, 97; rusty blackbird, 10; purple grackle, 108; brown-headed cowbird, 65; mixed flock of blackbirds, 2000 (±200); cardinal, 53; purple finch, 4; pine siskin, 11; Am. goldfinch, 37; eastern towhee, 3; spotted towhee, 6; Leconte's sparrow, 6 (O.W.L., R.L.G.); slate-colored junco, 208; tree sparrow, 218; field sparrow, 3; Harris's sparrow, 83; white-crowned sparrow, 4; white-throated sparrow, 47; fox sparrow, 23; Lincoln's sparrow, 5; song sparrow, 138. **Total,** 72 species; about 12,072 individuals.—Hugh Davis, Edith R. Force, Mrs. R. L. Ginter, Mable Hagan, Mr. and Mrs. T. J. Jessee, Orrin W. Letson, Thero North, H. T. Phillips, Jane Phillips, Boyd Robinson, Bess Smith, G. E. Tenney, Addie Fromholz, Florel Helema, Milton Curd, Bob Jenni, Bud Setliff, Donald Kiess (Tulsa Audubon Society).

306. Big Spring, Tex. (parks southwest of town to Moss Creek Lake 10 miles east; town and state parks, ranchland south and southeast of town, road to Moss Creek Lake, lake and canyon area above dam; elevation, 2300 ft. on Beal's Creek to 2750 ft. on Edwards Plateau; open park 15%, cultivated fields 20%, artificial lake 5%, mesquite thickets and long grass in stream valleys 15%, mesquite-juniper hillsides and table-land 45%).—Jan. 1; 7:30 a.m. to 5 p.m. Overcast; temp. 48° to 58°;

wind SW, 10-25 m.p.h.; ground dry, water open. Two observers in 1 party. Total hours, 9½ (4 on foot, 5½ in car); total miles, 57 (3 on foot, 54 by car). Pied-billed grebe, 2; mallard, 3; pintail, 120; green-winged teal, 15; ring-necked duck, 16; canvas-back, 15; lesser scaup duck, 9; buffle-head, 7; red-tailed hawk, 1; sparrow hawk, 1; bob-white, 12; mourning dove, 7; road-runner, 1; belted kingfisher, 1; red-shafted flicker, 6; ladder-backed woodpecker, 1; white-necked raven, 61; black-crested titmouse, 2; Bewick's wren, 3; rock wren, 1; mockingbird, 15; robin, 19; mountain bluebird, 55; ruby-crowned kinglet, 1; cedar waxwing, 7; loggerhead shrike, 10; starling, 31; myrtle warbler, 5; English sparrow, 128; weastern meadowlark, 74; cardinal, 51; house finch, 65; Am. goldfinch, 37; green-tailed towhee, 2; spotted towhee, 5; brown towhee (cañon), 8; lark bunting, 215; vesper sparrow, 16; Oregon junco, 259; white-crowned sparrow, 321. **Total,** 40 species; 1608 individuals. (Seen same day near prairie lakes 5 miles west of 15-mile limit: sandhill crane, 3546 (3500±500, 46.)—John E. and Margret K. Galley.

307. Commerce, Tex. (5-mile radius from Commerce, deciduous bottom woodland 40%, upland woodland 20%, open pasture land 40%; ponds, pools and streams dry or nearly so due to extended drought; for the same reason seeds and fruits were very scarce).—Jan. 2; 7:45 a.m. to 5:30 p.m. Cloudy, clearing in late p.m.; temp. 50° to 67°; wind E to S, mainly, at mid-day, 1-7 m.p.h.; Two observers together. Total hours, 9¾ (8½ on foot, 1¼ by car); total miles, 28 (15 on foot, 13 by car). Great blue heron (Ward's), 1; turkey vulture, 12; black vulture, 2; red-tailed hawk, 3; red-shouldered hawk, 2; rough-legged hawk, 1; marsh hawk, 4; sparrow hawk, 1; killdeer, 1; Wilson's snipe, 1; mourning dove, 78; barred owl, 4; yellow-shafted flicker, 15; pileated woodpecker, 1; red-bellied woodpecker, 15; yellow-bellied sapsucker, 4; downy woodpecker, 8; vermilion flycatcher, 1 (observed weekly since Nov. 14); horned lark, 35; blue jay, 18; Am. crow, 31; Carolina chickadee, 36; tufted titmouse, 11; brown creeper, 2; house wren, 1; winter wren, 1; Bewick's wren, 4; Carolina wren, 13; mockingbird, 20; brown thrasher, 7; robin, 10; hermit thrush, 3; eastern bluebird, 10; ruby-crowned kinglet, 2; Am. pipit, 50; cedar waxwing, 67; loggerhead shrike, 9; starling, 19; myrtle warbler, 3; eastern meadowlark, 40; red-wing, 29; rusty blackbird, 53; purple grackle (bronzed), 6; brown-headed cowbird, 10; cardinal, 83; Am. goldfinch, 16; eastern towhee, 2; spotted towhee, 2; Savannah sparrow, 41; Henslow's sparrow, 5; vesper sparrow, 1; lark sparrow, 59; slate-colored junco, 91; field sparrow, 118; Harris's sparrow, 117; white-crowned sparrow, 40; white-throated sparrow, 76; fox sparrow, 4; song sparrow, 11. **Total,** 59 species; 1313 individuals.—Lea Davis, Norah Selby O'Neil.

308. Del Rio, Tex. (eastern and southern outskirts of town to Devils River 13 miles northwest, open parks and thickets along San Felipe Creek, road to Villa Acuna, valley flats along U.S. side of Rio Grande from international bridge to tributary 2 miles northwest, Devils River canyon at Devils River siding and from U.S. Highway 90 bridge to Lake Walk above dam, and adjacent desert; elevation, 950 ft. in Rio Grande valley to 1400 ft. on Edwards Plateau; grassy park 2%, willow-sycamore grove 2%, underbrush and thickets along streams 2%, cattail and river-cane marsh 3%, inactive sand dunes and ridges 3%, irrigated farmland 20%, limestone canyons 8%, artificial lake 7%, mesquite-catclaw-cactus desert 53%).—Dec. 25; 7:30 a.m. to 6 p.m. Overcast, intermittent light rain from 10 a.m. to 5 p.m.; temp. 52° to 44° to 46°; wind N, 5-20 m.p.h.; ground slightly muddy, water clear and open. Two observers in 1 party. Total hours, 10½ (5½ on foot, 5 in car); total miles, 65 (5 on foot, 60 by car). Eared grebe, 1; double-crested cormorant, 1; great blue heron, 3; gadwall, 1; blue-winged teal, 9; buffle-head, 1; black vulture, 1; red-tailed hawk, 4; scaled quail, 1; Am. coot, 21; killdeer, 17; spotted sandpiper, 1; herring gull, 1 (imm.); mourning dove, 43; Inca dove, 10; horned owl, 1; belted kingfisher, 3; green kingfisher (Texas), 1; red-shafted flicker, 1; golden-fronted woodpecker, 8; yellow-bellied sapsucker (red-naped), 2; ladder-backed woodpecker, 1; eastern phoebe, 1; black phoebe, 1; verdin, 1; brown creeper, 1; Bewick's wren, 6; long-billed marsh wren, 3; cañon wren, 3; rock wren, 1; mockingbird, 17; robin, 55; eastern bluebird, 27; ruby-crowned kinglet, 3; Am. pipit, 25; cedar waxwing, 30; loggerhead shrike, 5; starling, 12; orange-crowned warbler, 1; myrtle warbler, 53; yellow-throat, 2; English sparrow, 246; meadowlark (sp.), 59; red-wing, 104; Brewer's blackbird, 4006 (4000±500, 6); boat-tailed grackle, 89; brown-headed cowbird, 30; cardinal, 12; pyrrhuloxia, 17; house finch, 11; Am. goldfinch, 51; spotted towhee, 3; brown towhee (cañon), 2; lark bunting, 8; vesper sparrow, 11; slate-colored junco, 8; white-crowned sparrow, 17; Lincoln's sparrow, 7; song sparrow, 3. **Total,** 59 species; about 5133 individuals. (Seen in area Dec. 26: pied-billed grebe, 1; baldpate, 4; pintail, 1; green-winged teal, 12; Am. golden-eye, 1; sharp-shinned hawk, 1; marsh hawk, 4; vermilion flycatcher, 1 [♀, observed at 20 ft., streaked breast and pinkish yellow underparts noted]; black-crested titmouse, 1; cactus wren, 3; Arkansas goldfinch, 3; desert sparrow, 11.)—John E. and Margret K. Galley.

309. El Paso, Tex. (center of area at point on Mount Franklin; Mesilla National Wildlife Refuge, Randel's Pool. Rio Grande levee and valley, Newman, Memorial and Ascarate parks, vicinity of Municipal Airport; river bosque 16%, river levee and irrigated farms 32%, dairy pens 1%, artificial

lake 16%, city park 8%, semi-arid canyon 8%, desert sandhills 16%).—Jan. 2; 7:30 a.m. to 2 p.m. Broken clouds; temp. 39° to 57°; wind W to SW, 12-60 m.p.h.; ground damp (.67 in. precipitation preceding day), water open. Seventeen persons in 5 parties. Total hours, 25½ (22 on foot, 3½ by car). Horned grebe, 1; pied-billed grebe, 18; great blue heron (Treganza's), 6; mallard, 81; gadwall, 32; baldpate, 275 (est.); green-winged teal, 178 (est.); blue-winged teal, 5 (est.); shoveller, 27; redhead, 2; canvas-back, 1; Am. merganser, 12; turkey vulture, 1; red-tailed hawk, 1; marsh hawk, 8; sparrow hawk, 6; scaled quail, 2; Gambel's quail, 76; Florida gallinule, 2 (first Christmas record in 4 years); Am. coot, 31; killdeer, 19; Wilson's snipe, 2; western sandpiper, 1; (unidentified small sandpipers, 23); ring-billed gull, 3; mourning dove, 11; road-runner, 2; long-eared owl, 1; belted kingfisher, 1; red-shafted flicker, 18; ladder-backed woodpecker (cactus), 1; horned lark, 11; white-necked raven, 56; verdin, 2; house wren, 1; rock wren, 2; mockingbird, 1; curve-billed thrasher, 1; robin, 51; western bluebird (chestnut-backed), 11; ruby-crowned kinglet, 6; Am. pipit, 3; loggerhead shrike (white-rumped), 10; starling, 195 (est.); English sparrow, 1278 (est.); western meadowlark, 11; yellow-headed blackbird, 500 (est.); red-wing, 2145 (est).; Brewer's blackbird, 2431 (est.); brown-headed cowbird, 150 (est.); pyrrhuloxia, 6; house finch, 247 (est.); spotted towhee (spurred), 1; desert sparrow, 7; sage sparrow, 11; Oregon junco, 93 (Shufeldt's, 79; Montana, 5; pink-sided, 9); gray-headed junco, 41 (including red-backed, 25); white-crowned sparrow (Gambel's), 221 (est.); song sparrow, 3. **Total,** 59 species (2 additional subspecies); about 8342 individuals.—Mmes. J. Owen Allen, Harry R. Conway, Lena McBee, Harriet McGuire, John K. Rose and Marguerite Wright; Mr. and Mrs. W. W. Wimberly; Misses Mary Belle Keefer, Francis Camp, Jennie Camp, Diane Quigley and Nancy Wilbanks; Messrs. Fred Andresen, Tommy Conway, Johnny Martin, Rickey Miles (El Paso Bird Study Club).

310. Fort Worth, Tex. (Lake Como, road bordering Ridglea Golf Course on east, roadside and pasture adjacent to Clear Fork of Trinity River south of T. & P. railroad, Trinity, Forest, and Boaz parks, Live Oak Creek at its junction with Lake Worth, Fish Hatchery near Eagle Mountain Lake; deciduous bottom woodland 60%, open pasture-land 15%, ponds and lakes 25%).—Jan. 2; 9 a.m. to 5:15 p.m. Clear; temp. 52° to 60°; wind S, 1-8 m.p.h. Six observers in 3 parties. Total hours, 15 (9 on foot, 6 in car); total miles, 109 (14 on foot, 95 in car). Mallard, 1; gadwall, 8; pintail, 28; shoveller, 8; redhead, 1; ring-necked duck, 24; canvas-back, 19; scaup duck (sp.), 30; ruddy duck, 4; turkey vulture, 14; marsh hawk, 3; sparrow hawk, 4; Am. coot, 12; killdeer, 8; Wilson's snipe, 3; herring gull, 8; ring-billed gull, 2; mourning dove, 3; belted kingfisher, 2; yellow-shafted flicker, 17; red-bellied woodpecker, 17; yellow-bellied sapsucker, 2; downy woodpecker, 1; ladder-backed woodpecker (Texas), 1; blue jay, 28; Am. crow, 14; Carolina chickadee (plumbeous), 50; tufted titmouse, 19; brown creeper, 13; Carolina wren, 12; mockingbird, 24; brown thrasher, 4; robin, 1°; hermit thrush, 1; eastern bluebird, 16; Am. pipit, 9; loggerhead shrike, 9; starling, 943; myrtle warbler, 2; English sparrow, 386; meadowlark (sp.), 91; red-wing, 23,142 (22,000 est., 1142); brown-headed cowbird, 138; cardinal, 67; Am. goldfinch, 44; spotted towhee, 8; slate-colored junco, 256; field sparrow, 5; Harris's sparrow, 41; fox sparrow, 2; song sparrow, 11. **Total,** 51 species; about 25,898 individuals.—Mrs. Robert H. Bowman, Mrs. Geo. S. Adams, Mrs. Jerry Stillwell, Mr. and Mrs. Wade Smith, Doris Smith.

311. Harlingen, Tex. (a circle with 7½-mile radius, with center 1 mile west of Rangerville; hackberry woodland 5%, brush 10%, canal banks, levies, and lakes 35%, open farmland and orchards 48%, townsites 2%).—Dec. 28; dawn to dusk. Fair; temp. 61° to 80°; calm before sunrise but SE wind, 30-40 m.p.h. most of day. Twenty-five observers in 10 parties. Total party-hours, 110; total party-miles, 235 (45 afoot, 190 by car). Eared grebe, 3; least grebe, 15; pied-billed grebe, 25; Mexican cormorant, 117; water-turkey, 50; great blue heron, 29; Am. egret, 51; snowy egret, 207; Louisiana heron, 28; little blue heron, 21; green heron, 5; black-crowned night heron, 65; Am. bittern, 2; least bittern, 1; white-faced glossy ibis, 140; white ibis, 125; Canada goose, 50; white-fronted goose, 15; mallard, 19; mottled duck, 31; gadwall, 140; baldpate, 61; pintail, 471; green-winged teal, 115; blue-winged teal, 35; shoveller, 155; redhead, 103; ring-necked duck, 1; canvas-back, 28; lesser scaup duck, 35; ruddy duck, 37; turkey vulture, 227; black vulture, 189; sharp-shinned hawk, 6; Cooper's hawk, 13; red-tailed hawk, 7; red-shouldered hawk, 17; Harris's hawk, 10; marsh hawk, 101; Audubon's caracara, 25; peregrine falcon, 5; pigeon hawk, 1; sparrow hawk, 96; chachalaca, 2; sora, 1; purple gallinule, 1; Florida gallinule, 7; Am. coot, 949; killdeer, 231 black-bellied plover, 1; Wilson's snipe, 65; long-billed curlew, 1; spotted sandpiper, 7; greater yellow-legs, 13; lesser yellow-legs, 28; least sandpiper, 221; dowitcher (long-billed), 242; semi-palmated sandpiper, 6; avocet, 20; black-necked stilt, 25; herring gull, 3; ring-billed gull, 23; laughing gull, 2; Franklin's gull, 6; Forster's tern, 2; common tern, 6; Caspian tern, 5; mourning dove, 130; ground dove, 160; Inca dove, 40; white-fronted dove, 14; road-runner, 2; screech owl, 4; ferruginous pygmy owl, 1; burrowing owl, 3; pauraque, 3; ruby-throated hummingbird, 1; belted kingfisher, 30; green kingfisher (Texas), 17; golden-fronted woodpecker, 38; yellow-bellied sapsucker, 1; ladder-

backed woodpecker, 25; Mexican kingbird (Couch's), 36; derby flycatcher, 44; eastern phoebe, 52; least flycatcher, 1; wood pewee, 2; vermilion flycatcher, 67; beardless flycatcher, 1; tree swallow, 5; green jay, 50; black-crested titmouse, 57; verdin, 5; house wren, 17; Bewick's wren, 18; Carolina wren, 30; long-billed marsh wren, 3; short-billed marsh wren, 2; mockingbird, 58; Sennett's thrasher, 8; curve-billed thrasher, 10; sage thrasher, 2; robin, 4; eastern bluebird, 8; blue-gray gnatcatcher, 31; golden-crowned kinglet, 1; ruby-crowned kinglet, 14; Am. pipit, 404; loggerhead shrike, 50; white-eyed vireo, 7; solitary vireo, 5; black and white warbler, 15; orange-crowned warbler, 21; Nashville warbler, 2; myrtle warbler, 103; Audubon's warbler, 1; black-throated green warbler, 12; yellow-throated warbler, 2; yellow-throat, 27; Am. redstart, 1; eastern meadowlark, 179; red-wing, 8800 (est.); Audubon's oriole, 3; Brewer's blackbird, 13; boat-tailed grackle, 1300 (est.); brown-headed cowbird, 75; red-eyed cowbird, 3; summer tanager, 1; cardinal, 37; pyrrhuloxia, 1; Sharpe's seedester, 10; Am. goldfinch, 146; Texas sparrow, 41; Savannah sparrow, 162; Baird's sparrow, 12; vesper sparrow, 15; lark sparrow, 225; Cassin's sparrow, 6; desert sparrow (black-throated), 25; chipping sparrow, 6; clay-colored sparrow, 7; field sparrow, 1; white-crowned sparrow, 5; Lincoln's sparrow, 42; swamp sparrow, 1; song sparrow, 3. **Total,** 146 species; about 17,811 individuals.—Luther C. Goldman, C. T. Gill, L. Irby Davis, Marshall Johnston, Mrs. F. W. Rompf, Mrs. Lena McBee, Richard Bentley, Mrs. Anna May Davis, Mrs. Maurine Gill, Charlotte DuBois, Mary Belle Keefer, Mrs. F. H. Davis, Mrs. D. C. Ring, Dial Duncan, Oras Williams, Berthold Weller, Robert Drawe, Carolyn Somers, Jimmy Reany, Nancy O'Kelley, Buford Slay, Kenneth Miller, Ann Miller, Stacy Caul, Ned Hudson.

312. Houston, Tex. (lower portion of San Jacinto River from point 15 miles upstream near Sheldon, southeast on both sides of river to mouth; heavy woods of pine and oak, cypress swamps, open fields, salt-water estuary, river bottom; same area as in previous years).—Dec. 26; 7 a.m. to 6 p.m. Cold and cloudy in morning, mild and sunny in afternoon; temp. 38° to 60°; wind NE, light. Sixteen observers in 4 parties. Total party-miles, 231 (190 by car, 41 on foot); total party-hours, 36. Pied-billed grebe, 29; white pelican, 345; brown pelican, 156; double-crested cormorant, 5; Mexican cormorant, 6; great blue heron, 22; Am. egret, 169; snowy egret, 9; Louisiana heron, 66; little blue heron, 28; black-crowned night heron, 12; Am. bittern, 1; white-faced glossy ibis, 75; mallard, 1000 (est.); gadwall, 253; baldpate, 279; pintail, 1500 (est.); shoveller, 230; ring-necked duck, 20; canvasback, 45; lesser scaup duck, 350 (est.); Am. golden-eye, 1; buffle-head, 1; turkey vulture, 58; black vulture, 20; Mississippi kite, 1 (positively identified—C.E.B., J.M.H.); Cooper's hawk, 2; red-tailed hawk, 47; red-shouldered hawk, 18; marsh hawk, 45; Audubon's caracara, 1; sparrow hawk, 59; clapper rail, 1; Am. coot, 1100 (est.); killdeer, 247; woodcock, 3; long-billed curlew, 2; greater yellow-legs, 2; herring gull, 14; ring-billed gull, 850 (est.); laughing gull, 47; gull-billed tern, 26; Forster's tern, 85; royal tern, 11; Caspian tern, 7; mourning dove, 43; barred owl, 1; belted kingfisher, 14; yellow-shafted flicker, 18; pileated woodpecker, 1; red-bellied woodpecker, 8; yellow-bellied sapsucker, 16; hairy woodpecker, 3; downy woodpecker, 8; eastern phoebe, 36; tree swallow, 800 (est.); blue jay, 35; Am. crow, 98; Carolina chickadee, 97; tufted titmouse, 65; brown-headed nuthatch, 8; brown creeper, 10; house wren, 4; winter wren, 4; Carolina wren, 24; long-billed marsh wren, 1; short-billed marsh wren, 7; mockingbird, 123; brown thrasher, 33; robin, 450 (est.); hermit thrush, 17; olive-backed thrush, 3 (conspicuous eye-ring and lack of reddish coloration noted—W.H.G.); eastern bluebird, 350 (est.); blue-gray gnatcatcher, 27; golden-crowned kinglet, 1; ruby-crowned kinglet, 78; Am. pipit, 285; cedar waxwing, 210; loggerhead shrike, 76; starling, 500 (est.); white-eyed vireo, 4; solitary vireo, 1; orange-crowned warbler, 2; myrtle warbler, 202; pine warbler, 34; yellow-throat, 8; English sparrow, 158; eastern meadowlark, 211; red-wing, 500 (est.); rusty blackbird, 14; Brewer's blackbird, 40,000 (est.); boat-tailed grackle, 2; purple grackle, 8; brown-headed cowbird, 50,000 (est.); cardinal, 137; pine siskin, 1; Am. goldfinch, 172; eastern towhee, 2; Savannah sparrow, 98; grasshopper sparrow, 1; seaside sparrow, 2; vesper sparrow, 55; lark sparrow, 1; chipping sparrow, 15; field sparrow, 16; white-crowned sparrow, 5; white-throated sparrow, 122; Lincoln's sparrow, 6; swamp sparrow, 5; song sparrow, 1. **Total,** 110 species; about 102,488 individuals.—C. E. Buehner, Nance C. Cunningham, Walter Dieckert, Mr. and Mrs. Werner H. Gottsch, Mr. and Mrs. Charles Hamilton, J. M. Heiser, Edna Miner, Homer Phillips, Leota Stillwell, Frank Watson, Carrie Wilcox, George G. Williams, Stephen Williams, Ella Wolfer.

313. Midland, Tex. (elevation about 2700 ft.; eastern two-thirds of town including neighborhood parks, cemetery, and Court House Square, to points northeast and southeast including small lake on Mustang Draw, City Reservoir and Sewer Farm, and surrounding sandy plains; water and marshy area 5%, parks and cemetery (elm and juniper) 3%, farmyards 7%, cultivated areas—chiefly sorghum grains and cotton 30%, sandy plains with mesquite thickets 55%).—Dec. 29; 7:30 a.m. to 6:15 p.m. Clear; temp. 34° to 48° to 42; wind N, 5-20 m.p.h., creating dust haze mid-afternoon; ice film in marshy area early morning. Two observers in 1 party for 2¾ hours, and 1 observer 8 hours. Total hours, 10¾ (9¼ in car, 1½ on foot); total

miles, 107½ (105 in car, 2½ on foot). Great blue heron, 1; baldpate, 2; canvas-back, 2; Am. golden-eye, 2; Am. merganser, 3; red-tailed hawk, 2; marsh hawk, 3; sandhill crane, 11; killdeer, 14; mourning dove, 21; ladder-backed woodpecker, 2; white-necked raven, 170; long-billed marsh wren, 1; loggerhead shrike, 12; starling, 10,795 (10,000±500, 795); English sparrow, 274; western meadowlark, 145; brown-headed cowbird, 2523 (2500±100, 23); pyrrhuloxia, 5; lark bunting, 167; vesper sparrow, 15; slate-colored junco, 3; Oregon junco, 29; tree sparrow, 5 (crown rufous, pale breast spot observed—M.K.G.); white-crowned sparrow, 80; Lincoln's sparrow, 4; song sparrow, 1. **Total,** 27 species; about 14,292 individuals. (Seen Dec. 27 in same area: red-shafted flicker, 7. The large number of starlings and cowbirds were in trees of Court House Square where they have established their winter roosting site.)—John E. and Margret K. Galley.

314. Billings, Mont. (from city 15 miles eastward through irrigated valley along south side of Yellowstone River to Huntley and return along north side of river; irrigated farmland 65%, timbered bottomland 20%, coulees and dry benchland 10%, rimrock cliff 5%).—Jan. 2; 8 a.m. to 5 p.m. Cloudy; temp. 20° to 26° to 8°; wind NW, 15 m.p.h., to E, 5 m.p.h.; ground covered with 3-in. fresh snow; river nearly closed with jammed drift ice, open water limited to a few holes along river and spring-fed creeks. Seven observers in 2 parties. Total party-hours, 9 (6½ on foot, 2½ by car); total miles, 50½ (40 by car, 10½ on foot). Mallard, 24; Am. golden-eye, 24; Am. merganser, 19; red-breasted merganser, 2; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 1; rough-legged hawk, 2; golden eagle, 1; bald eagle, 1; marsh hawk, 2; sparrow hawk, 1; sharp-tailed grouse, 6; European partridge, 11; ring-necked pheasant, 63; belted kingfisher, 1; red-shafted flicker, 6; hairy woodpecker, 1; Am. magpie, 92; piñon jay, 1; black-capped chickadee, 13; English sparrow, 22; western meadowlark, 25; red-wing, 3; common redpoll, 54; slate-colored junco, 1; Oregon junco, 5; tree sparrow, 66; white-crowned sparrow, 1; song sparrow, 9. **Total,** 30 species; 459 individuals.—John Byrn, Wilfred Crabb, John Gottschalk, Liven Peterson, Burton Rounds, George Spinner, Gordon Watson.

315. Columbia Falls, Mont. (around town, on the Flat; along river bluff to North Fork road crossing, Montana Soldier's Home; along river bank to Tway ranch, to railroad and on pole island; Mengon Creek from mouth to Mengon and Feirsteine ranchsteads and return; along old state road No. 2 by car around McWinniger Slough; town area 5%, pastures and open fields 40%, coniferous woods 15%, mixed brushy woodlands 20%, slough, swamp, and creek 10%).—Dec. 30; 8 a.m. to 5:30 p.m. Cloudy till about 10 a.m., clear till 3 p.m., cloudy afterward; temp. 18° at start, 30° at 3 p.m.; wind S, 12 m.p.h.; about 18-in. snow made coverage of other years impossible. Observers together till noon. Total hours, 8 (on foot); total miles, 37 (9 on foot, 28 by car). Mallard, 64; baldpate, 1 (observed at 100 yds. in clear sunlight with 7x50 glasses); Am. golden-eye, 6; goshawk, 1; ring-necked pheasant, 34; red-shafted flicker, 1; downy woodpecker, 2; Am. magpie, 3; common raven, 25 (24 in 1 flock); Clark's nutcracker, 3; mountain chickadee, 8; red-breasted nuthatch, 5; Townsend's solitaire, 1; Bohemian waxwing, 1; English sparrow, 74; evening grosbeak, 35; pine grosbeak, 27; redpoll (sp.), 157; song sparrow, 11. **Total,** 19 species; 459 individuals. (A robin was observed in town on day of the count by a non-observer.)—Stanley and Carleton Thoroman.

316. Fortine, Mont. (farms, river-flats, and forests in central Fortine valley, same territory as for past 20 years; mature larch-fir-pine forest 20%, second-growth fir-larch-lodgepole woods 40%, river-bottom spruce-aspen woods 25%, fields and open hills 15%).—Dec. 31; 8 a.m. to 5:30 p.m. Cloudy, snowing steadily after first hour; temp. 25° to 30°; wind SW, 8-30 m.p.h.; 8-18-in. dry snow on ground; springs and Grave Creek open, Fortine Creek frozen. Total hours, 9½; total miles 15 (on foot). Great blue heron, 1; mallard, 12; green-winged teal, 12; Am. golden-eye, 3; buffle-head, 1; hooded merganser, 1; bald eagle, 1; goshawk, 1; ruffed grouse, 3; horned owl, 1; hairy woodpecker, 1; downy woodpecker, 1; Am. magpie, 21; common raven, 42; Clark's nutcracker, 3; black-capped chickadee, 4; mountain chickadee, 3; red-breasted nuthatch, 1; golden-crowned kinglet, 2; common redpoll, 350±; song sparrow, 1; snow bunting, 27. **Total,** 22 species; about 492 individuals.—Winton Weydemeyer.

317. Kalispell, Mont. (east edge of city, around city dump, along Flathead River crossing at old steel bridge; east through farm area 2½ miles, north to Highway No. 2, and return to Kalispell; west part of city, around Northwest Dam, north 3 miles on highway to Buffalo Hill, south of Kalispell to airport and sewage disposal plant; open farmland 25%, town 15%, brushy stream banks 40%, marshes 20%).—Jan. 2; 8:30 a.m. to 4 p.m. Clear; temp. 4° to 15°; no wind; ground covered with 12-14-in. snow. One observer, assisted by 4 Boy Scouts, all in 1 party. Total hours, 7½ (5 on foot, 2½ in car); total miles, 26 (10 on foot, 16 by car). Mallard, 796; Am. golden-eye, 1; Am. merganser, 13; goshawk, 1; ring-necked pheasant, 55; belted kingfisher, 1; red-shafted flicker, 11; horned lark,

10; Am. magpie, 32; black-capped chickadee, 44; robin, 2; Bohemian waxwing, 456; starling, 3; English sparrow, 410; evening grosbeak, 31; redpoll (sp.), 9; Oregon junco, 25; song sparrow, 6. **Total,** 18 species; 1906 individuals.—Louis M. Moos (Soil Conservation Service).

318. Casper, Wyo. (North Platte River valley from just east of town to Speas Ranch hot springs on west including adjacent prairies and Casper Mountain; altitude varying from 5100 on prairie to 8000 ft. on mountain top; sage brush prairie and foothills 50%, cottonwood creek bottoms 20%, high altitude lodgepole pine forest 20%, juniper foothills 5%, urban 5%).—Jan. 2; 7:45 a.m. to 4:45 p.m. Blizzard (first day of a 3-day blizzard which was the worst in this region for many years), 10 in. of snow fell on mountain during day while lower altitudes had intermittent ground blizzards; temp. 14° to 12°, 0 on mountain; wind NE, 24 m.p.h. on prairie; all water frozen except for area of river kept open by hot springs; 4-ft. snow on mountain, bare ground and drifts on prairie. Eighteen observers in 5 parties. Total hours, 39; total miles, 162½ (131 by car, 22½ by foot, 8 by ski). Pied-billed grebe, 1; mallard, 60; green-winged teal, 1; Am. golden-eye, 10; Am. merganser, 3; rough-legged hawk, 3; golden eagle, 1; marsh hawk, 1; prairie falcon, 1; blue grouse (dusky), 11; sage hen, 6; ring-necked pheasant, 5; Wilson's snipe, 2; horned owl, 6; belted kingfisher, 3; yellow-shafted flicker, 2; red-shafted flicker, 15; hairy woodpecker, 1; downy woodpecker, 4; horned lark, 146; Am. magpie, 381; black-capped chickadee, 47; dipper, 1; robin, 15; Townsend's solitaire, 2; northern shrike, 1; starling, 137; English sparrow, 833; purple grackle, 3; house finch, 2; gray-crowned rosy finch, 236 (including Hepburn's, 1); pine siskin, 7; slate-colored junco, 8; Oregon junco (pink-sided), 1; tree sparrow, 125; Harris's sparrow, 3; song sparrow, 15; snow bunting, 1. **Total,** 38 species; (1 additional subspecies); 2100 individuals.—V. L. Becker, F. H. Brady, A. Brady, L. R. Burkhardt, R. R. Burkhardt, J. S. Curry, F. Freeman, J. Harbaugh, B. J. Horn, J. McKinney, C. H. Lavin, C. E. Piersall, B. Richardson, Dr. and Mrs. O. K. Scott, J. C. Shutz, Jr., B. E. Stephenson, B. E. Stephenson, Jr.

319. Moose, Wyo. (park headquarters west along general course of Beaver Creek, south along base of Teton Mountains to Phelps Lake moraine, thence easterly to west banks of Snake River, thence northeasterly through Snake River bottoms to highway at Moose; forested area of lodgepole pine, alpine fir, Douglas fir, spruce, aspen, and willow; open sagebrush land; river bottoms chiefly growths of cottonwood, willow, alder, and dense stands of blue spruce).—Dec. 28; 8 a.m. to 4:15 p.m. Clear most of day with light frost falling during a.m. and light clouds over mountains in late p.m.; temp. 6° to 16° to 9°; wind NW, light; ground snow-covered to depth of about 3½ ft.; all streams and ponds frozen or snow covered except main channel of Snake River and small areas at warm springs. Two observers in 1 party, total hours, 8 for 1 party; total miles, 12 (on skis). Great blue heron, 1; mallard, 8; ruffed grouse, 14; hairy woodpecker, 3; downy woodpecker, 1; Canada jay, 2; Steller's jay, 6; Am. magpie, 3; common raven, 4; Clark's nutcracker, 10; mountain chickadee, 37; black-capped chickadee, 17; pine grosbeak, 6. **Total,** 13 species; 112 individuals.—Blake VandeWater, Carl E. Jepson.

320. Barr Lake, Colo. (Barr Lake and Mile High Gun Club; wooded area 30%, adjacent prairie and irrigated farmland 70%).—Jan. 2; 7 a.m. to 12 m. Slightly overcast; temp. 20° to 30°; wind NW, 7 m.p.h.; ground snow covered; outer ⅔ of Barr Lake frozen, all surrounding small lakes frozen. Total miles, 15 (3 on foot, 12 by car). Great blue heron, 3; Canada goose, 14; mallard, 30,000 (est.); baldpate, 3000 (est.); pintail, 1500 (est.); green-winged teal, 200 (est.); blue-winged teal, 500 (est.) [no details—Ed.]; shoveller, 800 (est.); redhead, 100 (est.); canvas-back, 150 (est.); scaup duck (sp.), 10 (est.); Am. golden-eye, 100 (est.); buffle-head, 1; Am. merganser, 5; Cooper's hawk, 1 (V.C.R.); red-tailed hawk, 4; rough-legged hawk, 5; ferruginous hawk, 18; golden eagle, 3; bald eagle, 1; marsh hawk, 7; prairie falcon, 1; pigeon hawk, 1; sparrow hawk, 1; unidentified falcon, 1; Am. coot, 24; ring-necked pheasant, 8; killdeer, 1; herring gull, 10; ring-billed gull, 24; mourning dove, 3 (carefully observed at 30 ft. with 7X50 and 10X binoculars); screech owl, 1; red-shafted flicker, 17; hairy woodpecker, 3; downy woodpecker, 1 (V.C.R.); Am. magpie, 100 (est.); black-capped chickadee, 4; brown creeper, 3; robin, 3; starling, 73; English sparrow, 51; western meadowlark, 87; yellow-headed blackbird, 4; red-wing, 400 (est.); evening grosbeak, 1 (V.C.R.); house finch, 8; Am. goldfinch, 8; slate-colored junco, 6; Oregon junco (pink-sided), 8; gray-headed junco, 2; tree sparrow, 83; white-crowned sparrow, 13; song sparrow, 31. **Total,** 52 species; about 36,687 individuals. (Waterfowl on Barr Lake estimated on Dec. 18: 68,000 ducks and 25 geese—airplane survey by Game and Fish Dept.)—V. C. Rosenbaum, H. M. Webster, Jr.

321. Durango, Colo. (north of town 13 miles to Baker's Bridge, both sides of river, all in valley of Animas River; scrub oak and piñon covered hillsides 50%, cottonwood groves 10%, willow and brush thickets on valley floor 30%, open farmland 10%; elevation 6500 to 7000 ft.).—Jan. 1; 10 a.m.

to 5:30 p.m. Snow in morning, clear to overcast in afternoon; temp. 30° to 36° to 30°; wind less than 1 m.p.h., except occasional gusts 8-12 m.p.h.; entire area covered with about 12-in. snow; all ponds and still water frozen, ice along edges of river. Two observers together in car and on foot. Total hours, 7½ (3 on foot, 4½ in car); total miles, 38 (3 on foot, 35 by car). Great blue heron, 1; mallard, 2; shoveller, 1; Am. golden-eye, 1; Am. merganser, 7; golden eagle, 1; peregrine (?) falcon, 1; red-shafted flicker, 14; Lewis's woodpecker, 2; hairy woodpecker, 2; Steller's jay, 8; Am. magpie, 20; Am. crow, 1; black-capped chickadee, 65; mountain chickadee, 10; white-breasted nuthatch, 1; brown creeper, 2; robin, 2; western bluebird, 14; Townsend's solitaire, 1; English sparrow, 23; evening grosbeak, 1; Arkansas goldfinch, 6; spotted towhee, 1; Oregon junco, 25; gray-headed junco, 660 (500 est., 160). **Total,** 26 species; about 872 individuals.—Joseph and Marion Brown Borden.

322. Fort Collins, Colo. (area within circle of 7½-mile radius with center 4½ miles north-northwest of town, ¼ mile north of southwestern corner Sec. 22, Twp. T8N, R69W; open farmland 38%, cottonwood river bottom 20%, Ponderosa pine—Douglas fir mountain canyons 15%, mountain mahogany foothills 7%, city park—cemetery—town mixed growth 7%, bullrush and cattail marshes 3%, irrigation reservoirs 10%).—Dec. 30; dawn to dusk (7 a.m. to 5 p.m.). Clear; temp. 31° to 50° to 26°; wind NNE to SSW, principally a NW chinook in a.m., 12-24 m.p.h.; ground covered with 6-in. snow, deeper drifts; all water frozen except for parts of Cache La Poudre River. Nine observers in 4 parties in a.m., 6 in 2 parties in p.m. Total hours, 28 (18 on foot, 10 by car); total miles, 149 (19 on foot, 130 by car). Mallard, 2255 (1725 est., 530); baldpate, 25; pintail, 96; green-winged teal, 14; rough-legged hawk, 2; golden eagle, 3; bald eagle, 2; marsh hawk, 5; pigeon hawk, 1; sage hen, 1 (observed in flight at 25 ft.—R.G.B., J.F.C.); ring-necked pheasant, 96; rock dove, 2 (under bridge along river); belted kingfisher, 1; red-shafted flicker, 75; Lewis's woodpecker, 36; hairy woodpecker, 2; downy woodpecker, 3; horned lark, 5; Canada jay (Rocky Mountain), 1; Steller's jay, 12; Am. magpie, 132; Am. crow, 4; black-capped chickadee, 30; mountain chickadee, 10; brown creeper, 30; dipper, 10; cañon wren, 1; robin, 17; Townsend's solitaire, 2; golden-crowned kinglet, 1 (at 15 ft. in sun with 8x binoculars—J.F.C.); starling, 483 (arrived in flocks Dec. 23 during snowstorm—seen by all observers); English sparrow, 234; western meadowlark, 53; red-wing, 2; house finch, 54; white-winged junco, 8; slate-colored junco, 6; Oregon junco, 51 (Shufeldt's, 3; Montana, 1; pink-sided or undifferentiated, 47); gray-headed junco, 1; tree sparrow, 66; song sparrow, 34. **Total,** 41 species (2 additional subspecies); about 3866 individuals. (Seen in area Dec. 26; Wilson's snipe, 3; Dec. 29, sparrow hawk, 1.)—Mr. and Mrs. R. G. Beidleman, J. Frank Cassel, Glen A. Hutson, Meredith J. Morris, Mr. and Mrs. J. C. Penwell, Mr. and Mrs. D. V. Zander (Zoology Department, Colorado A. & M. College).

323. Lyons, Colo. (same area as last year, about 10 miles in diameter surrounding Lyons; altitude 5000 to 7500 ft.; plains, mostly farmland and including several small lakes and reservoirs and the St. Vrain Creek bottoms 60%, foothills, including Ponderosa pine forests, Douglas fir, and Colorado blue spruce, and the North and South St. Vrain Creek valleys 40%).—Dec. 26; 7 a.m. to 4 p.m. Clear; temp. 22° to 50°; no wind; reservoirs and ponds completely frozen; 5-6-in. snow on plains, 6-8 in. in foothills. Total hours, 8 (5 in car, 3 by foot); total miles, 73½ (68 by car, 5½ by foot). Mallard, 1 (on open spot in river); sharp-shinned hawk, 1 golden eagle, 1; sparrow hawk, 1; ring-necked pheasant, 27 (plus tracks of 12-20 others); killdeer, 3; rock dove, 2 (living in cliffs along So. St. Vrain); belted kingfisher, 4; red-shafted flicker, 23; Lewis's woodpecker, 5; hairy woodpecker, 3; downy woodpecker, 3; horned lark, 63; Steller's jay, 9; Am. magpie, 37; black-capped chickadee, 19; mountain chickadee, 1; bush-tit, 19 (flock followed for 20 minutes and carefully observed; small gray birds the shape and size of chickadees and with somewhat similar actions); brown creeper, 1; dipper, 3; cañon wren, 2; robin, 4; Townsend's solitaire, 2; northern shrike, 1; English sparrow, 49; western meadowlark, 60; red-wing 70 (±10); house finch, 38; pine siskin, 6; finch (sp.), 6; slate-colored junco, 4; Oregon junco, 12 (including at least 2 pink-sided); gray-headed junco, 2; unidentified juncos, 24; tree sparrow, 42; song sparrow, 5. **Total,** 34 species (1 additional subspecies); about 553 individuals.—Ronnie Bonnet, Hugh E. Kingery.

324. Sterling, Colo. (within 3-mile radius, irrigated farmland north and river woodlands east of town; irrigated farmland 40%, mature deciduous woodlands 50%, river bank 10%).—Jan. 1; 8 a.m. to dusk. Partly cloudy; temp. 29° to 44°; ground about half-covered with snow, no ice on river. Total hours, 9; total miles, 12 (on foot). Mallard, 14; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 1; red-shouldered hawk, 4; rough-legged hawk, 2; ferruginous hawk, 1; marsh hawk, 5; bob-white, 1; ring-necked pheasant, 112; Wilson's snipe, 1; horned owl, 1; belted kingfisher, 3; red-shafted flicker, 8; hairy woodpecker, 6; downy woodpecker, 1; horned lark, 147 (105 est., 42); blue jay, 1; Am. magpie, 118 (65 est., 53); Am. crow, 4; black-capped chickadee, 31; brown creeper, 1; Bewick's wren, 1; robin, 5; starling, 100 (est.); English sparrow, 76 (30 est., 46); western meadowlark,

103 (50 est., 53); red-wing, 231 (125 est., 106); house finch, 3; Am. goldfinch, 11; white-winged junco, 7; slate-colored junco, 8; Oregon junco, 68 (including pink-sided, 47); unidentified juncos, 105 (est.); tree sparrow, 251 (190 est., 61); song sparrow, 28. **Total,** 35 species (1 additional subspecies); about 1462 individuals.—Robert E. Lamb.

325. Bosque del Apache National Wildlife Refuge, San Antonio, N.Mex. (northern part of refuge lying west of Rio Grande River to Highway 85, along highway to point midway between San Antonio and Socorro; ponds and dikes 50%, irrigated farmland 25%, river bosque 5%, greasewood foothills 15%, creosote bush foothills 5%).—Dec. 26; 6:30 a.m. to 5 p.m. Overcast; intermittent snow flurries in a.m., partly cloudy in p.m.; light wind; temp. 28° at start, 36° at return; ground covered with 1½-in. snow at start, melting in p.m. Observers in 1 group from 9:30 a.m. until 3:15 p.m. Total hours, 12½ (4½ on foot, 8 by car); total party-miles, 54 (4 on foot, 50 by car). Pied-billed grebe, 6; great blue heron, 18; Am. egret, 4; black-crowned night heron, 2; whistling swan, 10; Canada goose, 2000 (1500 est., 500); snow goose, 112; mallard, 12,000 (11,580 est., 420); gadwall, 2000 (1700 est., 300); baldpate, 1500 (1300 est., 200); pintail, 1500 (1050 est., 450); green-winged teal, 2000 (1800 est., 200); shoveller, 60; redhead, 4; ring-necked duck, 12; canvas-back, 20; buffle-head, 1; ruddy duck, 4; Am. merganser, 136; Cooper's hawk, 3; red-tailed hawk, 6; bald eagle, 1 (adult); marsh hawk, 12; pigeon hawk, 1; sparrow hawk, 7; Gambel's quail, 135 (7 coveys); sandhill crane, 200; Am. coot, 35; killdeer, 3; Wilson's snipe, 4; greater yellow-legs, 3; ring-billed gull, 1; mourning dove, 12; horned owl, 2 (heard); belted kingfisher, 1; red-shafted flicker, 40; hairy woodpecker, 1; ladder-backed woodpecker, 2; Say's phoebe, 5; vermilion flycatcher, 1 (adult ♂, observed by all 3 observers); horned lark, 50; common raven, 2; long-billed marsh wren, 4; robin, 12; ruby-crowned kinglet, 5; Am. pipit, 105, loggerhead shrike, 6; starling, 4; Audubon's warbler, 1; English sparrow, 14; western meadowlark, 110; red-wing, 25,000 (est., a string of birds ¼ mile long); Brewer's blackbird, 4; brown-headed cowbird, 150; house finch, 55; Am. goldfinch, 15; spotted towhee, 8; Savannah sparrow, 20; vesper sparrow, 4 (R.J.F.); sage sparrow, 12; Oregon junco, 400; chipping sparrow, 30 (L.A., C.B.); white-crowned sparrow (Gambel's), 600; fox sparrow (slate-colored), 1; swamp sparrow, 2 (observed at 50 ft. with 8x30 binoculars; breast and rufous greater wing-coverts noted and compared with song sparrows in vicinity; specimen collected Dec. 9, 1948, from this site, identified as the western swamp sparrow by the Fish and Wildlife Service in Washington, D.C.; this is the first record for this species in the state—R.J.E.); song sparrow, 50. **Total,** 66 species; about 48,528 individuals.—Raymond J. Fleetwood, Lee W. Arnold, Carey Bennett.

326. Socorro, N.Mex. (vicinity of McAllister Lake, along Rio Grande River levee to Socorro, Highway 60 to Six-mile Canyon and up it to first windmill, returned to Socorro by same route then south 5 miles along the river levee, back to Socorro via the river levee; cattail marsh 20%, river bosque 10%, juniper—oak foothills 10%, river levee and irrigated farmland 60%).—Jan. 1; 7 a.m. to 5 p.m. Overcast in a.m., clearing before noon, scattered clouds in p.m.; temp. 32° at start, 58° at return; no wind. Total hours afield, 10 (5 on foot, 5 by car); total miles, 42 (4 on foot, 38 by car). Great blue heron, 3; Canada goose, 215; mallard, 30; gadwall, 13; pintail, 150; shoveller, 9; ring-necked duck, 5; Cooper's hawk, 2; red-tailed hawk, 5; marsh hawk, 4; sparrow hawk, 15; Gambel's quail, 18; ring-necked pheasant, 2; Am. coot, 4; killdeer, 1; ring-billed gull, 6; mourning dove, 84; road-runner, 2; belted kingfisher, 1; red-shafted flicker, 17; hairy woodpecker, 2; ladder-backed woodpecker, 2; Say's phoebe, 4; horned lark, 158; Bewick's wren, 2; long-billed marsh wren, 3; rock wren, 2; blue-bird (sp.), 7; ruby-crowned kinglet, 3; Am. pipit, 3; loggerhead shrike, 5; starling, 107; English sparrow, 120; western meadowlark, 53; yellow-headed blackbird, 10; red-wing, 10,000 (est.); Brewer's blackbird, 13; brown-headed cowbird, 4; house finch, 5; Am. goldfinch (pale), 12; spotted towhee, 5; brown towhee, 5; Savannah sparrow, 25; sage sparrow, 9; Oregon junco, 185; white-crowned sparrow (Gambel's), 150; swamp sparrow, 1 (observed at 20 ft. with 8x30 binoculars); song sparrow, 57; McCown's longspur, 3. **Total,** 49 species; about 11,541 individuals—Raymond J. Fleetwood.

327. Bear River Migratory Bird Refuge, Brigham, Utah (same area as in 1939 and subsequent counts; refuge headquarters west along canal road, south and east over dikes to Perry, north following highway along foothills to Brigham, west through fields and over salt flats, touching points along Bear River, and back to refuge headquarters).—Dec. 27; 9:30 a.m. to 4:30 p.m. Cloudy; temp. 27° to 32° to 28°; calm; light snow at 2 p.m., increasing later; water frozen except for pot holes; ground covered with 2-3 in. snow. Four observers in 1 party. Total hours afield, 7; total miles, 42 (41 by car, 1 on foot). Pied-billed grebe, 19; great blue heron, 9; black-crowned night heron, 1; whistling swan, 12; mallard, 200; pintail, 2; redhead, 1; canvas-back, 2; lesser scaup duck, 1; Am. golden-eye, 11; buffle-head, 3; ruddy duck, 2; Am. merganser, 28; red-breasted merganser, 2; rough-legged hawk, 13; golden eagle, 6; marsh hawk, 14; peregrine falcon, 1; California quail, 63; ring-necked pheasant, 169; Am. coot, 6; killdeer, 1;

Wilson's snipe, 5; short-eared owl, 3; red-shafted flicker, 6; horned lark, 2724 (1500±500, 724); Am. magpie, 28; common raven, 19; long-billed marsh wren, 3; loggerhead shrike, 1; starling, 36; English sparrow, 400; western meadowlark, 7; yellow-headed blackbird, 1; red-wing, 121; Brewer's blackbird, 100; Am. goldfinch, 325; Oregon junco, 6; tree sparrow, 75; white-crowned sparrow, 3; song sparrow, 32. **Total,** 41 species; 4461 indiv.—V. T. Wilson, J. B. Van den Akker, L. Young, R. Glahn.

328. Ogden, Utah (Ogden Bay Refuge, Weber and Ogden rivers, Burch Creek hollow and canyon, Ogden and warm water canyons, Ogden City cemeteries and parks, foothills, pastureland, hollows, swamps and river bottoms).—Dec. 27; 7:15 a.m. to 6 p.m. Overcast until 1:30 p.m., when a dry snow fell, continuing during rest of count; temp. 6° at start, 18° at finish; no wind. Seven observers in 5 parties. Total party-hours, 37½ (33 afoot, 4½ by car); total party-miles, 102 (35 afoot, 67 by car). Pied-billed grebe, 1; great blue heron, 1; Canada goose, 87; mallard, 350; baldpate, 28; pintail, 87; green-winged teal, 17; lesser scaup duck, 15; Am. golden-eye, 18; red-breasted merganser, 15; sharp-shinned hawk, 2; Cooper's hawk, 1; red-tailed hawk, 1; golden eagle, 1; marsh hawk, 6; sparrow hawk, 1; California quail, 172; ring-necked pheasant, 284; killdeer, 5; Wilson's snipe, 8; screech owl, 1; horned owl, 1; short-eared owl, 2; belted kingfisher, 1; red-shafted flicker, 23; Lewis's woodpecker, 1; downy woodpecker, 2; horned lark, 115; Steller's jay, 2; scrub jay, 7; Am. magpie, 70; black-capped chickadee, 65; dipper, 5; robin, 59; Townsend's solitaire, 6; ruby-crowned kinglet, 6; Am. pipit, 1; starling, 15 (close observation—N.N.); English sparrow, 470; western meadowlark, 63; red-wing, 23; pine siskin, 82; Am. goldfinch, 43; spotted towhee, 38; Oregon junco, 116; tree sparrow, 1 (R.H., R.P.); white-crowned sparrow (Gambel's), 48; song sparrow, 44. **Total,** 48 species; about 2410 individuals.—Robert Erwin, Ross Hardy, Noland Nelson, Paul Newey, Ray Newey, R. Pendleton, R. Porter.

329. Payson, Utah (from center of town to 3 miles south to 3 miles north; open farmland and pasture 50%, city and suburbs 50%).—Dec. 26; 9 a.m. to 5 p.m. Clear; temp. 2° to 20°; no wind; ground covered with 16-in. snow. Two observers in 1 party. Total hours, 7; total miles, 6 (on foot). Ring-necked pheasant, 125; killdeer, 14; Wilson's snipe, 1; red-shafted flicker, 29; Lewis's woodpecker, 2; downy woodpecker, 2; Steller's jay, 26; scrub jay, 9; Am. magpie, 18; Am. crow, 550; mountain chickadee, 19; black-capped chickadee, 22; mountain bluebird, 7; starling, 22; English sparrow, 88; western meadowlark, 4; red-wing, 58; pine siskin, 15; Am. goldfinch, 2; spotted towhee, 43; Oregon junco, 53 (Montana, 142; pink-sided, 11); white-crowned sparrow, 46 (including Gambel's, 18); fox sparrow, 2; song sparrow, 9. **Total,** 24 species (2 additional subsp.); 1266 individuals.—B. Moore, L. D. Pfouts.

330. Salt Lake City, Utah (within a radius of 7½ miles of the City and County Building; canyons and bench lands 40%, water courses and open country 40%, city parks and suburban areas 20%).—Dec. 26; 7:30 a.m. to 5:30 p.m. Clear except for mist rising from water courses; temp. 2° to 20° to 10° (morning temp. on bench land averaging about 10° higher); no wind; ground covered with 4-6-in. new snow in valley and over 12 in. in canyons; all open water except streams frozen. Thirty observers in 8 parties. Total hours, 57; total miles, 165 (78 on foot, 87 by car). Pied-billed grebe, 3; great blue heron, 6; black-crowned night heron, 1; Am. bittern, 1 (carefully observed—C.W.L., K.R.T.); Canada goose, 3; mallard, 826 (400±50, 426); gadwall, 38; baldpate, 142; pintail, 1176 (200±20, 976); green-winged teal, 616; cinnamon teal, 9; shoveller, 76; buffle-head, 1; ruddy duck, 1; Am. merganser, 13; goshawk, 1; sharp-shinned hawk, 4; Cooper's hawk, 2; red-tailed hawk, 4; rough-legged hawk, 7; ferruginous hawk, 2; golden eagle, 2; marsh hawk, 12; sparrow hawk, 17; California quail, 1019; ring-necked pheasant, 337; Am. coot, 5; killdeer, 37; Wilson's snipe, 19; least sandpiper, 1; California gull, 17; ring-billed gull, 2015 (2000±200, 15); mourning dove, 7; barn owl, 1 (R.B.S.); horned owl, 5; pygmy owl, 1 (R.B.S.); long-eared owl, 1; saw-whet owl, 1 (R.F., G.T., B.W.); red-shafted flicker, 158; Lewis's woodpecker, 3; yellow-bellied sapsucker, 2; downy woodpecker, 6; horned lark, 2635 (1500±150 in 3 flocks, 1135); Steller's jay, 7; scrub jay, 39; Am. magpie, 106; common raven, 1; Am. crow, 15; black-capped chickadee, 176; mountain chickadee, 24; brown creeper, 2; dipper, 1; long-billed marsh wren, 11; cañon wren, 1 (G.T.); robin, 248; hermit thrush, 5 (T.D., E.R.W.); Townsend's solitaire, 5; ruby-crowned kinglet, 4; Am. pipit, 43; Bohemian waxwing, 79; cedar waxwing, 24; northern shrike, 3; starling, 3025 (2500±250, 525); English sparrow, 4927 (4000±450, 927); western meadowlark, 55; yellow-headed blackbird, 2 (1 ♂ at each extreme of territory by Mrs. C.W.L. and 1 by T.E.); red-wing, 1559 (1400±50, 159); Brewer's blackbird, 3303 (3000±500, 303); evening grosbeak, 23; purple finch, 50 (A.M.W.); house finch, 344; black rosy finch, 38; pine siskin, 265; Am. goldfinch, 302; green-tailed towhee, 2 (T.A.D.); spotted towhee, 59; gray-headed junco, 10 (T.A.D.); slate-colored junco, 26; Oregon junco, 491 (including pink-sided, 35); tree sparrow, 11; Harris's sparrow, 1 (R.B.S.); white-crowned sparrow, 121 (including western white-crowned, 3—T.A.D.; Gambel's, 118); song sparrow, 295; snow bunting, 3 (R.B.S.). **Total,** 87 species; about 24,969 individuals.—Wm. A. Bader, M. R. Cheeseman, Thomas A. Dewey, Thayer

Evans, Jonathon Fairbanks, Reed Ferris and son Bob, Richard Goodfellow, Paul Graham, Robert Irwin, Mrs. Frank Jones, John Jones, Bill Kelso, Kathleen Lafferty, Mr. and Mrs. C. W. Lockerbie, Paul Newey, Robert Pendleton, R. D. Porter, J. M. Stevens, G. Steenbleek, R. B. Snow, K. R. Tanner, Gordon Taylor, Bert Webb, Jos. J. Weidner and son, E. R. Wilson and son David, A. M. Woodbury.

331. Havasu Lake National Wildlife Refuge, Mohave Co., Ariz. (Arizona portion of refuge above Topock, including refuge "neck"; open cattail marsh 50%, open water 20%, mesquite—arrowweed brush 25%, miscellaneous 5%).—Dec. 29; 7 a.m. to 5:30 p.m. Clear; temp. 35° to 60° to 40°; wind NNW, less than 1 m.p.h. Three observers in 2 parties; all observers together for 2 hours. Total hours, 20 (11 in outboard motorboat, 8 on foot, 1 in car); total miles, 38 (21 in boat, 7 on foot, 10 in car). Double-crested cormorant, 162; great blue heron, 23; Am. egret, 5; snowy egret, 6; black-crowned night heron, 18; Canada goose, 1753 (1150 est., 603); snow goose, 1225 (1200 est., 25); mallard, 58; gadwall, 419; baldpate, 48; pintail, 68; green-winged teal, 1419 (1110 est., 309); shoveller, 10; redhead, 51; ring-necked duck, 25; canvas-back, 1; lesser scaup duck, 2; Am. golden-eye, 7; bufflehead, 83; ruddy duck, 46; hooded merganser, 5; Am. merganser, 9; duck (sp.), 62; turkey vulture, 1; sharp-shinned hawk, 2; red-tailed hawk, 5; Harris's hawk, 18; golden eagle, 3; marsh hawk, 22; peregrine falcon, 1; sparrow hawk, 2; Gambel's quail, 73; sora, 1; Am. coot, 2317 (2160 est., 187); killdeer, 7; Wilson's snipe, 1; spotted sandpiper, 3; greater yellow-legs, 1; least sandpiper, 8; horned owl, 1; white-throated swift, 14; belted kingfisher, 3; flicker (sp., yellow-shafted or gilded), 1; red-shafted flicker, 9; Gila woodpecker, 7; ladder-backed woodpecker, 8; black phoebe, 11; Say's phoebe, 4; vermilion flycatcher, 11; tree swallow, 444 (350 est., 94); common raven, 1; verdin, 8; Bewick's wren, 1; long-billed marsh wren, 6; mockingbird, 1; crissal thrasher, 6; gnatcatcher (sp.), 19; ruby-crowned kinglet, 18; Am. pipit, 72; phainopepla, 5; loggerhead shrike, 9; Audubon's warbler, 140; yellow-throat, 2; English sparrow, 20; western meadowlark, 9; red-wing, 49; Brewer's blackbird, 125; pine siskin, 2; Arkansas goldfinch, 4; Abert's towhee, 3; white-crowned sparrow, 26; song sparrow, 11. **Total,** 71 species; about 9050 individuals.—Gale Monson, Warren Pulich, E. Stephen Stergios.

332. Imperial National Wildlife, Refuge Yuma, Ariz. (vicinity of Imperial Dam and southeast along shores of Lake Laguna; lake, marsh, desert, and flooded brushland types).—Jan. 2; 7 a.m. to 5:30 p.m. Overcast; temp. 37° to 61°; wind NW, strong. Observers together. Total hours, 8; total miles, 21 (1 on foot, 20 by car). Pied-billed grebe, 5; white pelican, 1; double-crested cormorant, 11; great blue heron, 6; Am. egret, 8; snowy egret, 4; black-capped night heron, 5; whistling swan, 2; Canada goose, 60; ducks (unidentified), 85; mallard, 35; gadwall, 6; baldpate, 132; pintail, 20; green-winged teal, 8; shoveller, 61; redhead, 22; ring-necked duck, 9; canvas-back, 5; lesser scaup duck, 44; ruddy duck, 8; turkey vulture, 9; red-tailed hawk, 1; Harris's hawk, 1; marsh hawk, 4; sparrow hawk, 1; Am. coot, 733; killdeer, 1; spotted sandpiper, 2; ring-billed gull, 700; mourning dove, 3; Gila woodpecker, 4; black phoebe, 3; Say's phoebe, 1; tree swallow, 36; cliff swallow, 3 [no details—Ed.]; mockingbird, 1; blue-gray gnatcatcher, 1; phainopepla, 1; ruby-crowned kinglet, 1; loggerhead shrike, 2; Audubon's warbler, 1; English sparrow, 2; western meadowlark, 1; Brewer's blackbird, 100; chipping sparrow, 1; white-crowned sparrow (Gambel's), 2. **Total,** 46 species; 2152 individuals.—Arthur F. and Audrey G. Halloran.

333. Santa Catalina Mts., Ariz. (usual area, south slope; pine-fir forest 22%, oak woods 12%, foothill canyons 14%, desert foothills 14%, ranches and ponds 29%, cottonwood-willow-mesquite 9%).—Jan. 2; 4:58 a.m. to 5:35 p.m. Mountain-tops wrapped in clouds, desert and foothills overcast, at start; after 9 a.m. intermittent rain, hail, and thunder on desert, rain and snow in oaks, almost steady snow and hail above; temp. in foothills 57° to 39°, at Summerhaven 29° to 26°; wind variable, mostly SW to NW, calm on desert at start, later gusts up to 30 m.p.h. on desert and 40 on top; 1-2-in. crusted snow above 7000 ft. at start, several inches (and snow extending down to 5000 ft. or below) at return. Fifteen observers in 8 parties. Total hours, 47; total miles, 129 (28 on foot, 101 by car). Pied-billed grebe, 2; mallard, 31; ring-necked duck, 4 (R.T.S., C.T.V.); Cooper's hawk, 2; red-tailed hawk, 3; prairie falcon, 1; sparrow hawk, 5; Gambel's quail, 149; sora, 1; Am. coot, 15; killdeer, 11; Wilson's snipe, 1; mourning dove, 22; Inca dove, 33; road-runner, 2; belted kingfisher, 3; red-shafted flicker, 21; gilded flicker, 3; Gila woodpecker, 61; Williamson's sapsucker, 2; hairy woodpecker, 1; ladder-backed woodpecker, 9; Arizona woodpecker, 2; Cassin's kingbird, 1 (E.D.M., V.M.M., R.B.S.); black phoebe, 6; Say's phoebe, 13; vermilion flycatcher, 2; Steller's jay, 1; scrub jay, 1; Arizona jay, 15; common raven, 1; mountain chickadee, 8; bridled titmouse, 4; verdin, 17; bush-tit, 12; white-breasted nuthatch, 3; pygmy nuthatch, 22; brown creeper, 6; dipper, 3 (A.J.F., W.X.F.); house wren, 3; Bewick's wren, 3; cactus wren, 14; long-billed marsh wren, 1; cañon wren, 1; rock wren, 9; mockingbird, 4; curve-billed thrasher, 29; crissal thrasher, 1; robin, 20; hermit thrush, 1; plumbeous gnatcatcher, 1 (plus 1 unidentified gnatcatcher); golden-crowned kinglet, 22; ruby-crowned kinglet, 35; Am. pipit, 1; phainopepla, 16; loggerhead shrike, 4;

Hutton's vireo, 2; Audubon's warbler, 33; black-throated gray warbler, 1; yellow-throat, 1; English sparrow, 73; eastern meadowlark, 65 (plus 45 unidentified meadowlarks, quite likely western); yellow-headed blackbird, 6; red-wing, 252; Brewer's blackbird, 84; brown-headed cowbird, 1; cardinal, 20; pyrrhuloxia, 4; house finch, 92; Am. goldfinch, 4; green-tailed towhee, 1; spotted towhee, 11; brown towhee, 32; Abert's towhee, 5; lark sparrow, 29; rufous-crowned sparrow, 1; desert sparrow, 2; slate-colored junco, 5 (A.J.E., W.X.F.); Oregon junco, 125 (Shufeldt's, 98; pink-sided, 27); gray-headed junco, 1; Arizona junco, 3; chipping sparrow, 25; black-chinned sparrow, 2; white-crowned sparrow (Gambel's, 209 (150 est., 59); fox sparrow, 1; Lincoln's sparrow, 3; song sparrow (mountain type), 11. **Total,** 87 species (1 additional subspecies); about 1771 individuals. Lack of bird activity due to bad weather. Considerable water in the Rillito and elsewhere from recent rains; area unchanged except that the cat menace in lower Sabino Canyon seems to have subsided.—C. S. Craven, Mr. and Mrs. W. X. Foerster, L. L. Hargrave, E. C. Jacot, Mrs. L. C. Marvin, Mr. and Mrs. E. D. Morton, Mrs. E. T. Nichols, Jr., Ivan Peters, A. R. Phillips, Richard Reed, R. T. Snyder, R. B. Streets, C. T. Vorhies (Bird Club of Tucson Natural History Society).

334. Tucson, Ariz. (usual area in Santa Cruz River valley; homes, yards, and golf course 25%, riparian cottonwoods and mesquite mesa 30%, irrigated farmland 21%, ponds 7%, mesquite bottomlands 6%, stockyards 4%, desert wash 4%, saguaro hills 3%).—Dec. 30; 6:30 a.m. to 5:45 p.m. Cloudy; temp. 44° to 60° to 57°; wind SE, about 10 to 25-30 to 15 m.p.h.. Nine observers in 5-6 parties, plus casual observations at homes by 4 others. Total hours, 37+; total miles, 130 (21 afoot, 109 by car). Canada goose, 55 (W.X.F., I.P.); mallard, 58; pintail, 2; green-winged teal, 42; shoveller, 2; black vulture, 72; sharp-shinned hawk, 4; red-tailed hawk, 8; golden eagle, 4; marsh hawk, 5; sparrow hawk, 19; Gambel's quail, 200; killdeer, 6+; Wilson's snipe, 1; least sandpiper, 18; mourning dove, 381; ground dove, 5; Inca dove, 53; road-runner, 3; northern (*asio*) screech owl, 2; horned owl, 2; white-throated swift, 1; Anna's hummingbird, 1; *Selasphorus* (sp.), 1 (Mrs. Baird; studied and identified Jan. 1 by E.D.M., V.M.M., A.R.P.; ♀ with call as in *rufus*); broad-billed hummingbird, 1 (♂—L.C.M.); red-shafted flicker, 32+; gilded flicker, 11; Gila woodpecker, 54; Lewis's woodpecker, 4; yellow-bellied sapsucker, 1; ladder-backed woodpecker, 7; black phoebe, 8; Say's phoebe, 20; flycatcher (sp.), 1 (very small, probably *Empidonax,* definitely not beardless—A.R.P.); vermilion flycatcher, 10; beardless flycatcher, 1 (A.J.F., I.P.); horned lark, 11; common raven, 1; bridled titmouse, 1; verdin, 30; white-breasted nuthatch, 1; brown creeper, 2; house wren, 4; Bewick's wren, 5; cactus wren, 38; long-billed marsh wren, 1; rock wren, 2; mockingbird, 6; Bendire's thrasher, 8; curve-billed thrasher, 40; crissal thrasher, 19; robin, 25; hermit thrush, 8; blue-gray gnatcatcher, 1; plumbeous gnatcatcher, 6; ruby-crowned kinglet, 37; Am. pipit, 79+; phainopepla, 5; loggerhead shrike, 25; Hutton's vireo, 3; solitary vireo, 4 (Cassin's, 3; plumbeous, 1, collected); Audubon's warbler, 18; English Sparrow, 857+; meadowlark (sp.), 498; yellow-headed blackbird, 751 (750 est., 1); red-wing, 1083 (750 est., 333); Brewer's blackbird, 530 (500 est., 30); brown-headed cowbird, 1134+; cardinal, 25; pyrrhuloxia, 26+; house finch, 210+; Am. goldfinch, 11; Arkansas goldfinch, 6; green-tailed towhee, 7; spotted towhee, 5; brown towhee, 9; Abert's towhee, 33; lark bunting, 1222+ (1000 est., 222+); Savannah sparrow, 4; vesper sparrow, 4; lark sparrow, 131; desert sparrow, 18; Oregon junco (Montana), 1; junco, 1 (unidentified); chipping sparrow, 33; Brewer's sparrow, 12; white-crowned sparrow (Gambel's), 605; fox sparrow, 1 (A.J.F., I.P.); Lincoln's sparrow, 1; song sparrow (mountain type), 17. **Total,** 89 species (2 additional subspecies); about 8710+ individuals. Santa Cruz River now almost bonedry; strong wind kept meadowlarks silent. (Seen in area Dec. 26-Jan. 4; Cooper's hawk, 1; pigeon hawk, 1; belted kingfisher, 1; orange-crowned warbler, 1; and an oriole [sp.] collected Dec. 26.)—Mrs. James Baird, W. G. Barnes, Bruce Cole, Mr. and Mrs. W. X. Foerster, Mrs. L. C. Marvin, Mr. and Mrs. E. D. Morton, Ivan Peters, A. R. Phillips, Edward Steele, Mrs. R. J. Thornburg, C. T. Vorhies (Bird Club of Tucson Natural History Society).

335. Spokane, Wash. (city parks and cemeteries, Spokane River, Little Spokane, Spokane valley to Dishman).—Dec. 26; 8:30 a.m. to 3 p.m. Heavy snowfall until 2 p.m.; temp. 24° to 32°; calm in a.m., chinook wind in late p.m.; 15-in. snow on ground. Nineteen observers in 10 parties. Total miles, 105 (100 by car, 5 on foot). Eared grebe, 1; pied-billed grebe, 1; great blue heron, 5; red-head, 1; snow goose, 1; mallard, 1171, baldpate, 50; pintail, 59; green-winged teal, 1; ring-necked duck, 60; lesser scaup duck, 2; Am. golden-eye, 175; Am. merganser, 12; sharp-shinned hawk, 2; red-tailed hawk, 1; bald eagle, 1; European partridge, 39; California quail, 113; ring-necked pheasant, 39; Am. coot, 7; ring-billed gull, 1; mourning dove, 5; red-shafted flicker, 36; hairy woodpecker, 4; downy woodpecker, 4; Am. magpie, 29; Am. crow, 2; black-capped chickadee, 36; red-breasted nuthatch, 4; pygmy nuthatch, 23; brown creeper, 5; robin, 279; varied thrush, 4; golden-crowned kinglet, 27; Bohemian waxwing, 170; northern shrike, 1; English sparrow, 320; western meadowlark, 2; red-wing, 572; evening grosbeak, 175; Cassin's finch, 150; house finch, 26; common redpoll, 25; red crossbill, 92; spotted towhee, 2; Oregon junco, 627; song

sparrow, 53. **Total,** 47 species; 4415 individuals.—Mr. and Mrs. Wm. B. Wright, Mrs. C. Roberts, Mrs. A. Clough, Mrs. Hobbs, Mr. and Mrs. S. O. Stanley, Ann Merager, H. Thompson, Earl Pettibone, Mrs. M. C. Haggin, Mrs. A. I. Buchecker, Mr. and Mrs. C. Tiegen, Mr. and Mrs. G. Morrow, Mr. and Mrs. P. Noble (Spokane Bird Club).

336. Eugene (Lane Co.), Oreg. (same area as in 1947 and previous counts; town vicinity, to and around Fern Ridge Reservoir; university campus and residential area 25%, orchards and fields 20%, pastureland 25%, Douglas fir forest 10%, deciduous woods 10%, river 5%, open lake 5%).—Jan. 2; 8:30 a.m. to 4:30 p.m. High fog till noon, then clear till 4 p.m., heavy fog thereafter; temp. 21° to 32° to 31°; wind variable, 1-2 m.p.h.; ground covered with 4-in. crusted snow, very slippery; all still water frozen; auto travel difficult; low temperature and snow very unusual. Twenty-three observers, 16 in home areas and feeding stations, and 7 in 6 parties in the field. Total hours, 64 (56 on foot, 8 in car); total miles, 60 (18 on foot, 42 by car). Loon (sp.), 1; pied-billed grebe, 6; great blue heron, 28; Canada goose, 1243 (including common, white-cheeked, and lesser; seen in mixed flocks on water and in flight at low elevations—H.P., B.H.P.); white-fronted goose, 3; mallard, 285; baldpate, 26; pintail, 220; green-winged teal, 103; shoveller, 1; wood duck, 12; canvas-back, 2; lesser scaup duck, 13; Am. golden-eye, 1; hooded merganser, 2; Am. merganser, 86; unidentified ducks, 4000; sharp-shinned hawk, 1; red-tailed hawk, 6; marsh hawk, 7; pigeon hawk (black), 1; sparrow hawk, 8; ring-necked pheasant, 80; Am. coot, 20; killdeer, 96; Wilson's snipe, 29; glaucous-winged gull, 5; ring-billed gull, 42; mourning dove, 8; burrowing owl, 1 (always in same location); belted kingfisher, 4; red-shafter flicker, 156; yellow-shafted flicker (hybrid), 1; acorn woodpecker, 17; hairy woodpecker, 16; downy woodpecker, 1; horned lark, 118; Steller's jay, 23; scrub jay (long-tailed), 1; Am. crow, 136; black-capped chickadee, 46; bush-tit, 20; white-breasted nuthatch, 4; brown creeper, 2; winter wren, 5; Bewick's wren, 3; robin, 2406; varied thrush, 154; hermit thrush, 5; golden-crowned kinglet, 66; ruby-crowned kinglet, 45; Am. pipit, 420; cedar waxwing, 15; Audubon's warbler, 5; Townsend's warbler, 1; English sparrow, 261; western meadowlark, 203; red-wing, 49; Brewer's blackbird, 907; evening grosbeak, 104; purple finch, 29; house finch, 102; pine siskin, 2; Am. goldfinch, 9; spotted towhee, 79; Savannah sparrow, 12; vesper sparrow, 2; Oregon junco, 1163; tree sparrow, 1 (seen many times at feed shelf, characteristics carefully noted—L.B.H., Mrs. R.B.; about 20 reported by C.A.S. but identification not positive); white-crowned sparrow, 12; golden-crowned sparrow, 37; fox sparrow, 36; Lincoln's sparrow, 1; song sparrow, 145. **Total,** 73 species (2 additional subspecies); about 13,199 individuals. (Seen in area Dec. 24-Jan. 2, but not included in count; horned grebe, 1; double-crested cormorant, 2; snow goose, 1; ruddy duck, 14; Cooper's hawk, 1; bald eagle, 1; bob-white, 6; horned owl, 2; pileated woodpecker, 1; yellow-bellied sapsucker [red-breasted], 2; common raven, 6; starling, 800 est. [in single dense flock—first record for area, about 100 birds, reported 1 year ago]; western bluebird, 2; myrtle warbler, 1; Arkansas goldfinch [green-backed], 9.)—Mrs. Neil Banks, Dr. Geo. S. Beardsley, Arthur Bevers, Mrs. J. D. Bahling, Mrs. Lawrence T. Burgh, Celeste Campbell, C. E. Croson, Catherine Dunlop, Mary Ebner, Irene Flynn, Mrs. Wright Gullion, Louise B. Hastings, Mrs. Robt. Betts, Scott N. Jewitt, K. F. Krugur, Dr. J. Hugh Pruett, Mrs. John Radmore, Ada Shuey, Cora A. Saunders, Mrs. F. L. Travis, G. M. Wright, Hal Pruitt, Ben H. Pruitt (Eugene Natural History Society).

337. Klamath Falls, Oreg. (along highways west to Keno, east to Langell valley, north to Geary Ranch; open fields 7%, marshland 5%, pine woodland 5%, juniper-bordered farmland 33%, lake and river 36%, residential 14%).—Dec. 26; 9 a.m. to 3 p.m. Heavy overcast; temp. 21° to 27°; wind NNW, 10-12 m.p.h.; ground covered with 4-6-in. snow; lakes frozen, rivers open. Eleven observers in 5 groups. Total hours, 21; total miles, 97 (87 by car, 10 by foot). Pied-billed grebe, 38; great blue heron, 5; black-crowned night heron, 21; whistling swan, 9; Canada goose, 217 (lesser, 90; cackling, 25); white-fronted goose, 9; (unidentified geese, 24); mallard, 265; gadwall, 54; baldpate, 30; pintail, 618; green-winged teal, 12; shoveller, 472; ring-necked duck, 1; canvas-back, 8; lesser scaup duck, 30; Am. golden-eye, 72; buffle-head, 85; ruddy duck, 228; (unidentified ducks, 614); hooded merganser, 2; Am. merganser, 63; Cooper's hawk, 3; red-tailed hawk, 9; rough-legged hawk, 4; (unidentified hawks, 21); golden eagle, 1; bald eagle, 2; marsh hawk, 8; sparrow hawk, 6; California quail, 295; mountain quail, 15; ring-necked pheasant, 36; Am. coot, 203; Wilson's snipe, 2; California gull, 2; red-shafted flicker, 19; yellow-bellied sapsucker (red-breasted), 1; downy woodpecker, 3; Canada jay (Oregon), 1; Steller's jay, 14; scrub jay, 14; Am. magpie, 32; mountain chickadee, 52; robin, 120; mountain bluebird, 2; Townsend's solitaire, 5; northern shrike, 1; Audubon's warbler, 1; English sparrow, 353; western meadowlark, 20; red-wing, 40; Brewer's blackbird, 302; evening grosbeak, 10; purple finch, 50; house finch, 4; Arkansas goldfinch (green-backed), 13; spotted towhee, 2; slate-colored junco, 2; Oregon junco, 217; song sparrow, 64. **Total,** 58 species; 4826 individuals.—Alice Waldron, Jackie Cobo, Robert French, Lawrence A. French, Naomi R. French, Kenneth McLeod, Edith McLeod, James L. O'Donahue, Buena Stone, William Harris, Myrtle Harris.

338. Portland, Oreg. (15-mile diameter circle, centered downtown, same as in 1938 and subsequent counts; brushy lowlands, 15%, lakes and rivers 15%, woodlands 30%, farmland 20%, residential areas 20%).—Dec. 26. Clear; temp. 28° to 36°; wind E, 10-20 m.p.h. Fifty-six observers in 16 parties. Total hours, 113 (73 on foot, 40 by auto); total miles, 313 (95 on foot, 218 by auto). Horned grebe, 1; western grebe, 1; pied-billed grebe, 13; double-crested cormorant, 93; great blue heron, 47; green heron, 14; black-crowned night heron, 2; Canada goose, 37; snow goose, 24; mallard, 1783; gadwall, 11; European widgeon, 2; baldpate, 9667; pintail, 2346; green-winged teal, 3399; shoveller, 16; ring-necked duck, 9; canvas-back, 109; lesser scaup duck, 29; buffle-head, 50; ruddy duck, 11; hooded merganser, 7; Am. merganser, 70; unidentified ducks, 400; sharp-shinned hawk, 3; Cooper's hawk, 3; red-tailed hawk, 8; sparrow hawk, 10; ruffed grouse, 1; sandhill crane (little brown), 42; ring-necked pheasant, 56; Am. coot, 426; killdeer, 132; Wilson's snipe, 51; least sandpiper, 2; dowitcher, 3; western sandpiper, 10; glaucous-winged gull, 1638; herring gull, 580; California gull, 83; ring-billed gull, 4; short-billed gull, 392; unidentified gulls, 4652; band-tailed pigeon, 36; screech owl, 1; belted kingfisher, 4; red-shafted flicker, 103; pileated woodpecker, 1; Lewis's woodpecker, 1; yellow-bellied sapsucker (red-breasted), 3; hairy woodpecker, 2; downy woodpecker, 56; Steller's jay, 31; scrub jay, 7; Am. crow, 788; black-capped chickadee, 323; chestnut-backed chickadee, 68; bush-tit, 245; white-breasted nuthatch, 4; red-breasted nuthatch, 6; brown creeper, 8; winter wren, 48; Bewick's wren, 36; robin, 2306; varied thrush, 231; hermit thrush, 63; bluebird (sp.), 2; Townsend's solitaire, 2; golden-crowned kinglet, 350; ruby-crowned kinglet, 32; Am. pipit, 189; orange-crowned warbler, 1; myrtle warbler, 1; Audubon's warbler, 96; Townsend's warbler, 1; English sparrow, 255; western meadowlark, 34; red-wing, 9; Brewer's blackbird, 382; evening grosbeak, 12; purple finch, 150; house finch, 177; pine siskin, 222; Am. goldfinch, 918; Arkansas goldfinch, 19; spotted towhee, 164; Oregon junco, 1603; white-crowned sparrow, 7; golden-crowned sparrow, 116; fox sparrow, 30; song sparrow, 1001. **Total,** 89 species; about 36,381 individuals.—Norbert Leupold, Louis Oberson, Burton Bailey, David B. Marshall, Albert W. Marshall, Mr. and Mrs. C. L. Marshall, Ben Layman, Mr. and Mrs. H. C. Judd, Clyde Leon Keller, Clyde Leon Keller, Jr., Waldo Ek, Mr. and Mrs. Frank Blakeslee, Mr. and Mrs. Frank A. Bartlett, Brian McNab, Dale Widner, Mrs. W. B. Holden, Mr. and Mrs. Leo F. Simon, Lotus Simon, E. A. Kelham, Jack Williams, Mr. and Mrs. Kenneth Leatherman, Gordon Leach, Mrs. R. O. Boyd, Mrs. Jessie Franz, Mrs. Susie Nicholson, Joyce Wildes, Isabel Wildes, Mrs. Ormond Rankin, Esther Maegly, Mr. and Mrs. J. W. C. Williams, Arlie Seaman, Carroll Higgins, N. G. Seaman, Mrs. A. L. Mills, Mrs. Theodore Adams, Mrs. L. J. Merrill, W. H. Crowell, T. T. Munger, Osgood Munger, Duncan Munger, H. H. Crowell, Tim Wood, P. E. Lewis, Earl A. Marshall, Nancy Marshall, Mr. and Mrs. Leslie Bartow, Robert Millette, Mrs. Althea Bailey (Oregon Audubon Society).

339. Bakersfield, Calif. (Hart Memorial Park, 6 miles northeast of Bakersfield on Kern River, about 100 acres; native and exotic trees and lawns maintained by irrigation, weeds and willows bordering artificial streams and along river).—Dec. 31. Cloudy and foggy early in a.m., changing to scattered cumulus and clear by evening; temp. 40° to 55°; calm. Total hours, 9. Pied-billed grebe, 4; great blue heron, 2; mallard, 21; green-winged teal, 1; shoveller, 4; wood duck, 7; canvas-back, 1; ring-necked duck, 8; lesser scaup duck, 1; ruddy duck, 1; Am. merganser, 3; Cooper's hawk, 1; sharp-shinned hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 2; sparrow hawk, 1; California quail, 18; ring-necked pheasant, 6; Am. coot, 86; killdeer, 11; spotted sandpiper, 1; western sandpiper, 2; ringed turtle dove, 2; Anna's hummingbird, 1; belted kingfisher, 1; red-shafted flicker, 32; acorn woodpecker, 10; yellow-bellied sapsucker, 2; Nuttall's woodpecker, 3; black phoebe, 13; Say's phoebe, 5; brown creeper, 2; house wren, 2; Bewick's wren, 2; mockingbird, 4; robin, 96; varied thrush, 5; hermit thrush, 15; western bluebird, 7; Townsend's solitaire, 1; ruby-crowned kinglet, 46; Am. pipit, 55; cedar waxwing, 35; loggerhead shrike, 2; orange-crowned warbler, 1; Audubon's warbler, 240; yellow-throat, 1; English sparrow, 58; yellow-headed blackbird, 1; red-wing, 500 (est.); tri-colored blackbird, 15; Brewer's blackbird, 4000 (est.); brown-headed cowbird, 400 (est.); house finch, 110; Am. goldfinch, 110; spotted towhee, 4; Savannah sparrow, 25; lark sparrow, 35; Oregon junco, 82; chipping sparrow, 1; white-crowned sparrow, 108; golden-crowned sparrow, 5; fox sparrow, 3; Lincoln's sparrow, 9; song sparrow, 6. **Total,** 65 species; about 6238 individuals. (Additional species seen in park Dec. 24; western meadowlark, 100; white-throated swift, 101; band-tailed pigeon, 1; white-breasted nuthatch, 1; baldpate, 1.)—H. E. McClure.

340. Benicia (Solano Co.), Calif. (same area as in 1933 and several subsequent years; observers together by car with frequent stops to canvass marsh, waterfront, and live-oak hill area along highway between Benicia and Cordelia, 14 miles apart; Benicia waterfront 25%, marsh 20%, open fields 15%, hills 40%).—Jan. 2; 8 a.m. to 5 p.m. Clear; temp. 32° to 48° to 40°; wind NW, 13-18 m.p.h. One observer in a.m., 2 in p.m. Total hours, 14 (12 on foot, 2 in auto); total miles, 50 (20 on foot, 30 by auto). Western grebe, 5; great blue heron, 1; Am. egret, 4; black-crowned night heron,

4; snow goose, 300 (est.); pintail, 75; shoveller, 31; canvas-back, 79; Am. golden-eye, 3; red-tailed hawk, 4; marsh hawk, 6; sparrow hawk, 22; Am. coot, 2420 (2000 est., 420); killdeer, 18; black-bellied plover, 4; willet, 1; red-backed sandpiper, 2; western sandpiper, 13; avocet, 11; glaucous-winged gull, 10; western gull, 42; California gull, 6; Bonaparte's gull, 7; horned owl, 1; red-shafted flicker, 53; downy woodpecker, 1; black phoebe, 1; tree swallow, 2; scrub jay, 15; robin, 260; varied thrush, 3; hermit thrush, 1; western bluebird, 14; mountain bluebird, 15; ruby-crowned kinglet, 8; Am. pipit, 18; cedar waxwing, 10; loggerhead shrike, 25; myrtle warbler, 1; Audubon's warbler, 31; English sparrow, 120; western meadowlark, 90; red-wing, 42; tri-colored blackbird, 13; Brewer's blackbird, 2415 (2000 est., 415); purple finch, 2; house finch, 28; Am. goldfinch, 310; Arkansas goldfinch, 3; spotted towhee, 2; Savannah sparrow, 17; junco (sp.), 105; white-crowned sparrow, 90; golden-crowned sparrow, 10; song sparrow, 3. **Total,** 55 species; about 6777 individuals. Water birds not seen in usual winter abundance as hunting season was open.—Marjorie M. Stoner, Emerson A. Stoner.

341. Big Bear Lake, Calif. (parts of a 15-mile diameter circle centering near Bertha Peak in the San Bernardino Mts. about 3 miles north-northeast of Big Bear P.O. and extending throughout Big Bear valley and to Box H Springs on desert slope and to bottom of Upper Santa Ana Canyon near Seven Oaks; altitude 3500-7200 ft.; Big Bear and Baldwin lakes omitted on account of difficult accessibility; vegetation covered with ice and few birds seen indicate meager count would have resulted; sage brush 8%, creosote bush 25%, willows and cottonwoods 20%, canyon streams 22%, chaparral 25%).—Jan. 2; 7:30 a.m. to 4:30 p.m. Intermittent snow; cold; streams edged with ice; wind 10-30 m.p.h.; blew for 2 days previously. Nine observers in 3 parties. Total hours, 60 (15 by car, 45 on foot); total miles, 30 (15 by car, 15 on foot). Sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 4; golden eagle, 2; prairie falcon, 1; killdeer, 1; Wilson's snipe, 2; red-shafted flicker, 5; acorn woodpecker, 3; hairy woodpecker, 1; horned lark, 8; Steller's jay, 3; scrub jay, 1; mountain chickadee, 34; white-breasted nuthatch, 1; robin, 4; hermit thrush, 2; western bluebird, 2; ruby-crowned kinglet, 4; loggerhead shrike, 2; pine siskin, 44; spotted towhee, 3; brown towhee, 8; Oregon junco, 33; white-crowned sparrow, 50; golden-crowned sparrow, 5; song sparrow, 4. **Total,** 27 species; 229 individuals.—Don Bleitz, Mr. and Mrs. J. H. Comby, Virginia Fairbanks, Kim Hendy, Henry Isham, R. E. Mall, Dorothy Murray, R. L. Taylor.

342. Calipatria, Calif. (south end of Salton Sea; 15-mile circle with approximate center at North End School, including Calipatria, State Game Refuge, Mullet Island, part of Federal Refurge on Salton Sea, irrigated fields from Westmoreland to within a mile of Niland; area 150-241 ft. below sea-level; dry cultivated fields 18%, irrigated fields 20%, weedy roadsides and ditch banks 24%, lakes 9%, stream and riparian border 9%, shore of Salton Sea 20%).—Jan. 1; 6 a.m. to 5:30 p.m. Clear; wind NW, light during day to 30 m.p.h. off sea at sunset. Four observers in 1 party. Total hours, 11 (on foot or with numerous short side-trips from car); total miles, 51 (5 on foot, 46 by car). Eared grebe, 10; pied-billed grebe, 1; white pelican, 10; great blue heron, 1; Am. egret, 50; snowy egret, 30; green heron, 1; black-crowned night heron, 6; white-faced glossy ibis, 7; Canada goose, 120; snow goose, 102; baldpate, 100; pintail, 300; green-winged teal, 6; shoveller, 55; ring-necked duck, 1; canvas-back, 45; lesser scaup duck, 4; ruddy duck, 14; turkey vulture, 12; red-tailed hawk, 5; marsh hawk, 3; sparrow hawk, 20; Gambel's quail, 4; sora, 4; Am. coot, 150; mountain plover, 105; killdeer, 30; black-bellied plover, 4; long-billed curlew, 6; spotted sandpiper, 3; willet, 40; greater yellow-legs, 80; lesser yellow-legs, 2; least sandpiper, 120; red-backed sandpiper, 1; dowitcher, 6; western sandpiper, 1; marbled godwit, 10; avocet, 120; black-necked stilt, 1; California gull, 2; ring-billed gull, 1 (plus 600 unidentified gulls, probably of this species); Forster's tern, 12; mourning dove, 100; road-runner, 5; burrowing owl, 2; red-shafted flicker, 10; Gila woodpecker, 4; black phoebe, 25; Say's phoebe, 50; vermilion flycatcher, 1; horned lark, 70; tree swallow, 12; verdin, 9; cactus wren, 3; long-billed marsh wren, 3; mockingbird, 4; crissal thrasher, 1; mountain bluebird, 1; blue-gray gnatcatcher, 13; ruby-crowned kinglet, 4; Am. pipit, 150; phainopepla, 20; loggerhead shrike, 30; orange-crowned warbler, 3; Audubon's warbler, 6; yellow-throat, 5; English sparrow, 50; western meadowlark, 80; red-wing, 600; brown-headed cowbird, 15; house finch, 1; Am. goldfinch, 4; Abert's towhee, 10; Savannah sparrow, 35; lark sparrow, 20; white-crowned sparrow, 300; song sparrow, 3. **Total,** 79 species; about 3854 individuals. (Seen in area Dec. 31: whistling swan, 1.)—H. Clarke, R. E. Mall, A. Small, R. L. Taylor.

343.—Crystal Springs Reservoir (San Mateo Co.), Calif. (South San Francisco Bay in vicinity of Belmont Slough and San Mateo Bridge, Spring valley and lakes, Northern Santa Cruz Mts. and Pacific Ocean at Half Moon Bay; open salt water 15%, tidal salt marsh 10%, exposed mud flats 5%, lawns and shrubbery 10%, fresh-water lakes 10%, chaparral-covered hillsides 15%, farm and grazing land 15%, forested canyons and ridges 10%, ocean beach 10%).—Jan. 2; 8 a.m. to 5 p.m. Clear; temp. 35° to 55°; wind N, 13-18 m.p.h. Twenty-three observers in 7 parties. Total hours, 115 (60 on foot,

55 by car); total miles, 550 (90 on foot, 460 by car). Red-throated loon, 1; western grebe, 34; horned grebe, 4; eared grebe, 2; pied-billed grebe, 7; double-crested cormorant, 14; Brandt's cormorant, 11; great blue heron, 9; Am. egret, 41; snowy egret, 1; whistling swan, 8; Canada goose, 452 (including cackling, 2); blue goose, 1 (wintering with Canada geese at Crystal Springs Reservoir, also seen Jan. 8); mallard, 25; gadwall, 10; baldpate, 12; green-winged teal, 10; shoveller, 56; pintail, 760; canvas-back, 1000; scaup duck (sp.), 460; ring-necked duck 8; Am. golden-eye, 29; buffle-head, 10; old-squaw, 1; white-winged scoter, 15; surf scoter, 40; ruddy duck, 110; Am. merganser, 2; red-breasted merganser, 4; turkey vulture, 14; white-tailed kite, 1; sharp-shinned hawk, 3; Cooper's hawk, 5; red-tailed hawk, 42; red-shouldered hawk (red-bellied), 2; marsh hawk, 5; sparrow hawk, 33; California quail, 180; Am. coot, 1200; black-bellied plover, 125; killdeer, 120; Wilson's snipe, 1; long-billed curlew, 23; willet, 150; greater yellow-legs, 2; least sandpiper, 450; red-backed sandpiper, 120; dowitcher (eastern), 20; marbled godwit, 55; sanderling, 65; avocet, 200; glaucous-winged gull, 3; western gull, 32; herring gull, 60; California gull, 45; ring-billed gull, 100; short-billed gull, 530; Forster's tern, 6; common murre, 1; band-tailed pigeon, 430; Anna's hummingbird, 4; white-throated swift, 30; hairy woodpecker, 1; acorn woodpecker, 15; red-shafted flicker, 34; black phoebe, 16; Say's phoebe, 4; horned lark, 15; Steller's jay, 9; scrub jay, 28; plain titmouse, 6; chestnut-backed chickadee, 20; bush-tit, 170; white-breasted nuthatch, 1; pygmy nuthatch, 3; wren-tit, 19; Bewick's wren, 11; winter wren, 2; rock wren, 1; California thrasher, 5; hermit thrush, 17; varied thrush, 13; robin, 130; western bluebird, 18; ruby-crowned kinglet, 11; Am. pipit, 60; cedar waxwing, 63; loggerhead shrike, 6; Hutton's vireo, 1; myrtle warbler, 1; Audubon's warbler, 59; redwing, 2; tri-colored blackbird, 3; western meadowlark, 730; Brewer's blackbird, 650; English sparrow, 20; purple finch, 7; house finch, 370; Am. goldfinch, 4; Arkansas goldfinch (green-backed), 41; pine siskin, 15; spotted towhee, 10; brown towhee, 52; Savannah sparrow, 83; lark sparrow, 25; rufous-crowned sparrow, 2; Oregon junco, 63; white-crowned sparrow, 650; golden-crowned sparrow, 73; fox sparrow, 9; song sparrow, 32. **Total,** 113 species; about 10,774 individuals.—James G. Peterson, Max Schreiber, Myrtle Moore, Miss Gibson, Mr. and Mrs. Clyde Prusman, C. L. Sleeper, Grace Brubaker, Mr. and Mrs. Albert Wool, Kent Carnie, M. F. Vessel, Mrs. Hillebrand, Mr. and Mrs. Charles Zwaal, Emily Smith, Henri Hill, Florence Durfee, Elsie Hoeck, Mr. and Mrs. Irving Snow, J. B. Sterling, J. P. Rigby (members and guests, Santa Clara Valley Audubon Society).

344. Los Angeles, Calif. (same area as in previous 10 years; short stretch of ocean beach 8%, salt-water marsh, lagoons, canals, gun-club marsh 17%, open rolling hills 7%, oak and holly-covered canyons 17%, brush-covered foothill slopes 15%, city parks and library grounds 8%, city reservoirs and park lakes 20%, golf courses, cemeteries, campuses 4%, city and suburban streets and yards 4%).—Dec. 27; 6:35 a.m. to 5:30 p.m. After night of intermittent rain, clear at 5:30 a.m. but clouding over by 7 a.m.; light to heavy intermittent showers with some lightning and thunder, some sunshine; temp. 43° to 54°; wind SE to NW, 1-5 m.p.h.; wet, ground bare with new grass and weeds just breaking through in sheltered spots due to recent rains. Thirty-nine observers in 17 parties. Total hours, 114 (90 on foot, 24 by car); total miles, 204 (58 on foot, 146 by car.) Common loon, 1; arctic loon, 1; Holboell's grebe, 1 (identifying characters noted by Kents, Cogswell, Mall, Stultz); horned grebe, 4; eared grebe, 45; western grebe, 13; pied-billed grebe, 45; brown pelican, 45; double-crested cormorant, 42; Brandt's cormorant, 2; great blue heron, 21; Am. egret, 25; snowy egret, 53; green heron, 3; black-crowned night heron, 38; Canada goose (cackling), 1; gadwall, 8; baldpate, 233; pintail, 420; green-winged teal, 71; shoveller, 533; redhead, 14; ring-necked duck, 70; canvas-back, 363; lesser scaup duck, 555; Am. golden-eye, 2 (observers familiar with this species—Mr. and Mrs. W.A.K.); buffle-head, 5; white-winged scoter, 118; surf scoter, 331; ruddy duck, 379; Am. merganser, 29; red-breasted merganser, 32; sharp-shinned hawk, 9; Cooper's hawk, 3; red-tailed hawk, 17; marsh hawk, 4; prairie falcon, 1; peregrine falcon, 1; sparrow hawk, 31; California quail, 144; clapper rail (light-footed), 1; Am. coot, 792; snowy plover, 20; semipalmated plover, 27; killdeer, 127; black-bellied plover, 226; surf-bird, 15; ruddy turnstone, 4; black turnstone, 93; long-billed curlew, 2; Hudsonian curlew, 7; spotted sandpiper, 12; willet, 1415; greater yellow-legs, 1; lesser yellow-legs, 1; least sandpiper, 312; red-backed sandpiper, 150; dowitcher (long-billed), 500; western sandpiper, 237; marbled godwit, 229; sanderling, 278; avocet, 200; black-necked stilt, 2 (a few have wintered for past several years); glaucous-winged gull, 154; western gull, 302; herring gull, 10; California gull, 4682 (4000 est., 682); ring-billed gull, 875; short-billed gull, 22; Franklin's gull, 1 (identification studied carefully at about 75 ft. with 9x35 binoculars—H.C., R.M., A.S.); Bonaparte's gull, 601; Heermann's gull, 65; Forster's tern, 10; band-tailed pigeon, 2; mourning dove, 136; Chinese spotted dove, 124; ringed turtle dove, 101; road-runner, 2; horned owl, 3; burrowing owl, 2; white-throated swift, 121; Anna's hummingbird, 135; belted kingfisher, 9; red-shafted flicker, 73; acorn woodpecker, 21; yellow-bellied sapsucker (red-breasted), 4; Nuttall's woodpecker, 3; ash-throated flycatcher, 2 (1 or 2 occasionally winter near coast); black phoebe, 103; Say's phoebe, 5; horned lark (California), 600 (500 est., 100); scrub jay, 140; Am. raven, 4; plain titmouse, 26;

bush-tit, 319; wren-tit, 112; house wren, 6; Bewick's wren, 15; long-billed marsh wren (tule), 4; cañon wren (dotted), 1; mockingbird, 181; California thrasher, 65; robin, 622; hermit thrush, 31; western bluebird, 35; blue-gray gnatcatcher, 19; ruby-crowned kinglet, 89; Am. pipit, 36; cedar waxwing, 20; loggerhead shrike, 11; Hutton's vireo, 3; orange-crowned warbler, 3; Audubon's warbler, 1672; Townsend's warbler, 15; yellow-throat, 11; English sparrow, 350; western meadowlark, 144; red-wing, 29; Brewer's blackbird, 1092; brown-headed cowbird (dwarf), 12; purple finch, 29; house finch, 1474; Am. goldfinch (willow), 76; Arkansas goldfinch (green-backed), 54; spotted towhee, 46; brown towhee, 201; Savannah sparrow, 152 (western, 130; Belding's, 18; large-billed, 4); lark sparrow, 64; rufous-crowned sparrow, 5; Oregon junco (Thurber's), 53; gray-headed junco, 4 (carefully observed by P.C., a former National Park naturalist); chipping sparrow, 49; white-crowned sparrow (Gambel's), 645; golden-crowned sparrow, 34; fox sparrow, 29; song sparrow, 99. **Total,** 136 species (2 additional subspecies); about 24,613 individuals. (Seen in area Dec. 23, off-shore from Santa Monica, whistling swan, 16 [H.C.]; Dec. 26, parasitic jaeger, 1 [R.M.].)—Mr. and Mrs. Wyatt A. Kent, Alma Stultz, M. Gertrude Woods, Laura Greely, Howard Cogswell, Ralph Mall, J. Stanley Brode, Bernard Canellman, Mrs. May Warrick, Nellie Spencer, Helen Reed, Mrs. Eva Brothers, Audrey Brothers, Marguerite Driver, George T. Hastings, Mr. and Mrs. Chas. Brush, Bess M. Hoffman, Ruby Curry, Mary V. Hood, Earl R. Russell, Justin Russell, M. S. Dunlap, Arnold Small, Dorothy Groner, Chas. C. Ayres, Jr., Paul W. Colburn, Noel McFarland, Mrs. Mary B. Salmon, Harriet Damert, Mrs. C. J. Parker, Mrs. Ruth McCune, Clara S. Weedmark, Edward R. Terry, C. R. Thomas, R. W. Julian, May Wait, Caroline H. Daugherty (Southwest Bird Study Club, Santa Monica Nature Club, Pasadena Audubon Society, Los Angeles Audubon Society).

345. Marysville, Calif. (center of town including public parks, 1 mile; woods and river bottoms north of Marysville, 2 miles; unimproved portion of Ellis Lake in outlying district within city limits of Marysville, 1 mile; north and northeast of Marysville along irrigated farmlands to Browns Valley, 12 miles; south of Marysville in tule and rice fields, 5 miles; open farmland 40%, foothill area 20%, town suburbs 10%, decidious town lots 15%, cattail marsh 15%).—Jan. 2; 10 a.m. to 4 p.m. Clear; temp. 39° at start, 35° at finish; good visibility; wind 35 m.p.h. Five observers in 2 parties. Total hours, 30 (2 on foot, 28 in car); total miles, 40 (2 by foot, 38 in car). Pied-billed grebe, 4; white pelican, 42; great blue heron, 11; Am. egret, 57; green heron, 2; black-crowned night heron, 84; whistling swan, 62; Canada goose, 545; white-fronted goose, 152; snow goose, 1; mallard, 68; pintail, 1; shoveller, 5; turkey vulture, 58; Cooper's hawk, 1; red-tailed hawk, 4; golden eagle, 1; marsh hawk, 9; pigeon hawk, 2; sparrow hawk, 14; California quail, 16; ring-necked pheasant, 8; Florida gallinule, 9; Am. coot, 211; killdeer, 115; Wilson's snipe, 1; mourning dove, 11; barn owl, 21 (after 8 p.m.); saw-whet owl, 3; red-shafted flicker, 51; acorn woodpecker, 23; yellow-bellied sapsucker (red-naped), 3 (J.C.R., J.R.B.); hairy woodpecker, 2 (J.R.B.); downy woodpecker, 4; black phoebe, 4; Say's phoebe, 1; horned lark, 8; scrub jay, 12; yellow-billed magpie, 75; Am. crow, 7; plain titmouse, 11; bush-tit, 20; Bewick's wren, 4; rock wren, 1; mockingbird, 4; robin, 10; hermit thrush, 4 (J.C.R.); western bluebird, 42; mountain bluebird, 13; Am. pipit, 143; cedar waxwing, 47; loggerhead shrike, 7; Hutton's vireo, 1; myrtle warbler, 24; Audubon's warbler, 51; English sparrow, 57; western meadowlark, 161; red-wing, 50; Brewer's blackbird, 6075 (est.); house finch, 74; Am. goldfinch, 23; spotted towhee, 6; brown towhee, 3; Savannah sparrow, 27; lark sparrow, 24; slate-colored junco, 10 [no details—Ed.]; Oregon junco, 76; white-crowned sparrow, 245; golden-crowned sparrow, 48. **Total,** 69 species; about 8969 individuals.—J. C. Ries, J. R. Beeson, Bessie Lamberskin, Tunia Vandenbout, G. Cable (Yuba-Sutter Audubon Society).

346. Monterey Peninsula, Calif. (Laguna del Rey, Hotel Del Monte grounds and golf course, El Estero, oak-studded hillside at foot of Jack's Peak, Monterey Catholic Cemetery, Monterey harbor, Pacific Grove water front to Asilomar beach, Carmel River-mouth lagoon, Pebble Beach, parts of Carmel Village, area in vicinity of intersection of State Highway No. 1 and Carmel valley road, areas along the latter road to a point 1.5 miles east of intersection, area in vicinity of this road at points 3.3 and 7 miles east of intersection, ½ mile up Robeson Canyon, ocean and exposed bays 16%, beaches 9%, river-mouth lagoon 4%, ponds and tule swamps 21%, rocky shore 8%, open fields 13%, brushland 7%, Monterey pine woodland 7%, live oak woodland 4%, golf courses, 2%, garden, village, etc., 2%, redwood canyon 2%).—Dec. 28; 7 a.m. to 7 p.m. Clear; temp. max. 55°, min. 37°; wind NE to W, 0-10 m.p.h. Six observers in 3 parties. Total hours, 20½ (19 on foot, 1½ by car); total miles, 19 (8 on foot, 11 by car). Common loon, 7; arctic loon, 6; Holboell's grebe, 3; horned grebe, 23; eared grebe, 21; western grebe, 98; pied-billed grebe, 11; fulmar, 32; brown pelican, 113; double-crested cormorant, 1; Brandt's cormorant, 339; pelagic cormorant, 86; great blue heron, 3; snowy egret, 2; green heron, 1; black-crowned night heron, 3; Canada goose, 1; brant, 1; mallard, 98; baldpate, 3; pintail, 45; green-winged teal, 2; cinnamon teal, 3; shoveller, 338; ring-necked duck, 28; canvas-back, 174; lesser scaup duck, 71; Am. golden-eye, 1; buffle-head, 9; white-winged scoter, 37; surf scoter,

419; ruddy duck, 161; red-breasted merganser, 45; red-tailed hawk, 5; marsh hawk, 2; peregrine falcon, 1; sparrow hawk, 6; California quail, 49; Virginia rail, 4; Am. coot, 708; black oyster-catcher, 4; snowy plover, 41; killdeer, 142; black-bellied plover, 11; surf-bird, 20; black turnstone, 53; Wilson's snipe, 2; willet, 38; marbled godwit, 6; sanderling, 205; glaucous-winged gull, 126; western gull, 138; herring gull, 11; California gull, 13; ring-billed gull, 2; short-billed gull, 246; Bonaparte's gull, 8; Heermann's gull, 16; ancient murrelet, 4; rhinoceros auklet, 1; band-tailed pigeon, 27; rock dove, 2 (on rocky islet off shore); horned owl, 2; Anna's hummingbird, 7; belted kingfisher, 5; red-shafted flicker, 31; acorn woodpecker, 20; hairy woodpecker, 3; downy woodpecker, 1; Nuttall's woodpecker, 1; black phoebe, 12; Say's phoebe, 3; horned lark, 25; violet-green swallow, 20; tree swallow, 5; Steller's jay, 3; scrub jay, 21; yellow-billed magpie, 2; Am. crow, 5; chestnut-backed chickadee, 40; plain titmouse, 2; bush-tit, 200; pygmy nuthatch, 13; wren-tit, 20; winter wren, 3; Bewick's wren, 2; long-billed marsh wren, 1; California thrasher, 1; robin, 46; varied thrush, 7; hermit thrush, 10; western bluebird, 3; blue-gray gnatcatcher, 2; ruby-crowned kinglet, 53; Am. pipit, 36; loggerhead shrike, 2; Hutton's vireo, 11; Audubon's warbler, 29; Townsend's warbler, 12; yellow-throat, 1; English sparrow, 16; western meadowlark, 34; red-wing, 171; tricolored blackbird, 30; Brewer's blackbird, 129; purple finch, 8; house finch, 48; pine siskin, 1; Am. goldfinch, 1; spotted towhee, 15; brown towhee, 7; Savannah sparrow, 3; Oregon junco, 100; white-crowned sparrow, 96; golden-crowned sparrow, 65; fox sparrow, 10; Lincoln's sparrow, 2; song sparrow, 12. **Total,** 118 species; 5484 individuals.—Dr. and Mrs. W. A. Angwin, Miss F. Morrow, Mrs. J. B. Spellar, R. W. Storer, L. O. Williams (Monterey Peninsula Audubon Society).

347. Morro Bay, Calif. (ocean beach opposite extreme southern end of bay, shore of bay there and at Baywood and from Los Osos Creek to White Point in Morro Bay State Park, brief stop near Los Osos School 3½ miles east of bay, area southwest of San Luis Obispo to junction of highway U.S. 101 and road southeast from Laguna School, this point the farthest from areas covered around bay—13 miles; sandy beach and adjacent ocean 6%, salt-water bay 26%, salicornia marsh 13%, dune scrub 3%, chaparral 4%, wet plowed fields 5%, open farmland 31%, willow-bordered stream beds 6%, cemetery 6%).—Dec. 30; 4:35 to 7:20 a.m. 8:20 a.m. to 4:50 p.m. High, nearly uniform overcast; temp. about 35° to 55°; wind NE. about 25 m.p.h. before dawn, lessening to 10-15 m.p.h. during day; marshes covered by very high tide until midafternoon. Two observers in 1 party. Total hours, 8.8 (afoot, or using car as blind along bay shore); total miles on foot, 6. Common loon, 3; arctic loon, 1; red-throated loon, 4; Holboell's grebe, 1; horned grebe, 21; eared grebe, 34; western grebe, 27 (25±5, 2); pied-billed grebe, 3; white pelican, 100 (±5); brown pelican, 16; double-crested cormorant, 45 (±5); great blue heron, 63; Am. egret, 14; snowy egret, 2; whistling swan, 1 (apparently sick bird which had been around only a few days); brant (black), 667 (650±50, 17); baldpate, 158 (150±30, 8); pintail, 711 (700±75, 11); green-winged teal, 810 (800±100, 10); shoveller, 321 (320±40, 1); canvas-back, 3; lesser scaup duck, 3 (brought in from outer bay by hunters); buffle-head, 13; white-winged scoter, 21+; surf scoter, 113 (100±20, 13); scoters (unidentified), 300 (±30); ruddy duck, 359 (350±40, 9); ducks (unidentified), 1000 (±150); turkey vulture, 9; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 4; marsh hawk, 2; peregrine falcon, 1; sparrow hawk, 7; Am. coot, 3713 (3700±400, 13); snowy plover, 14; semipalmated plover, 6; killdeer, 250 (±10); black-bellied plover, 624 (600±50, 24); Wilson's snipe, 3; long-billed curlew, 66 (40±5, 26); spotted sandpiper, 1; willet, 5300 (±500); greater yellow-legs, 8; knot, 14 (unusually high number for mid-winter; compared directly with dowitchers at about 60 ft. with 9x binoculars, gray coloration, short bills, and lack of white up the back all noted; 1 flock); least sandpiper, 504 (500±50, 4); red-backed sandpiper, 9; dowitcher, 20; western sandpiper, 2+; unidentified small sandpipers, 2800 (±300); marbled godwit, 1410 (1400±200, 10); sanderling, 13; avocet, 122 (120±5, 2); glaucous-winged gull, 12; western gull, 63 (50±5, 13); herring gull, 4; California gull, 15; ring-billed gull, 52 (50±5, 2); unidentified gulls (mostly California and/or ring-billed), 160 (±20); Heermann's gull, 1; royal tern, 1; mourning dove, 1; horned owl, 1; white-throated swift, 70 (±15); Anna's hummingbird, 1; belted kingfisher, 2; red-shafted flicker, 7; acorn woodpecker, 1; yellow-bellied sapsucker (red-breasted), 1; black phoebe, 7; Say's phoebe, 4; horned lark, 2; scrub jay, 2; Am. crow, 4; bush-tit, 20 (±5, in 2 small flocks); wren-tit, 6; house wren, 1; Bewick's wren, 6; long-billed marsh wren, 1; California thrasher, 2; robin, 49 (20±3, 29); hermit thrush, 2; western bluebird, 23; ruby-crowned kinglet, 5; Am. pipit, 5; cedar waxwing, 65 (±5); loggerhead shrike, 6; myrtle warbler, 1; Audubon's warbler, 114 (75±10, 39); yellow-throat, 8; English sparrow, 14+; western meadowlark, 37 (20±5, 17); red-wing, 2706 (2700±300, 6); tri-colored blackbird, 5+ (males only identified from among large flock of red-wings); Brewer's blackbird, 250 (±50); brown-headed cowbird, 2; house finch, 64; Am. goldfinch, 2; Arkansas goldfinch, 2; unidentified finches, 5; spotted towhee, 1; brown towhee, 1; Savannah sparrow, 163 (160±10, 3); white-crowned sparrow, 141 (120±15, 21); golden-crowned sparrow, 7; fox sparrow, 1; Lincoln's sparrow, 1; song sparrow, 9. **Total,** 104 species; about 23,852 individuals.—Howard L. and Bessie Cogswell.

348. Norco, Calif. (center of 15-mile diameter circle at Norco, including Lake Norconian, Santa Ana River basin east and west from Hamner Ave., low barren mountains east and south of Temescal Rd., surrounding farms).—Dec. 30; 8 a.m. to 6:30 p.m. Overcast; temp. 45° to 61°; wind E, 10-20 m.p.h., gusts 20-45 m.p.h.; visibility good. Total hours, 12½ (10 on foot, 2½ by car); total miles, 18 (6 on foot, 12 by car). Horned grebe, 1; eared grebe, 1; western grebe, 2; pied-billed grebe, 75; double-crested cormorant, 28; great blue heron, 2; Am. egret, 5; snowy egret, 2; green heron, 1; black-crowned night heron, 6; Canada goose, 17; mallard, 100; European widgeon, 1 (♂ observed closely with 10x50 binoculars); baldpate, 300; pintail, 120; green-winged teal, 85; cinnamon teal, 2; shoveller, 250; redhead, 6; canvas-back, 300; ring-necked duck, 75; lesser scaup duck, 11; buffle-head, 13; ruddy duck, 400; hooded merganser, 1 (♀ observed closely in good light); Am. merganser, 37; red-breasted merganser, 12; red-tailed hawk, 2; sparrow hawk, 7; Florida gallinule, 2; Am. coot, 150; killdeer, 4; ring-billed gull, 85; mourning dove, 6; road-runner, 1; barn owl, 1; red-shafted flicker, 3; western kingbird, 1; black phoebe, 1; Say's phoebe, 2; Am. crow, 2; rock wren, 1; mockingbird, 2; blue-gray gnatcatcher, 1; ruby-crowned kinglet, 1; loggerhead shrike, 8; Audubon's warbler, 18; English sparrow, 23; Brewer's blackbird, 230; house finch, 57; brown towhee, 11; sage sparrow (Bell's), 5; white-crowned sparrow, 40; song sparrow, 3. **Total,** 54 species; 2520 individuals. (Seen in area Jan. 2: gadwall, 15; blue-winged teal, 2.—Arnold Small.

349. Oakland, Calif. (Mills College and near vicinity, Leona Heights, Sequoia Park, Skyline Blvd. area, Lake Merritt, San Leandro Bay, Bay Farm Island, east bay shore from Point Isabelle to Bay Bridge approach, Berkeley Yacht Harbor, Berkeley Aquatic Park, southern tip of San Pablo Reservoir, and Saint Mary's College).—Dec. 26; 8 a.m. to 5:30 p.m. Almost constant rain, windy; temp. 41° to 48°. Eleven observers in 5 groups. Total miles, 65 (16 afoot, 49 by car); total hours, 28 (20 afoot, 8 by automobile). Horned grebe, 8; eared grebe, 43; western grebe, 18; pied-billed grebe, 35; brown pelican, 1; double-crested cormorant, 1515 (est.); great blue heron, 7; Am. egret, 6; snowy egret, 3; black-crowned night heron, 107; Canada goose, 37; mallard, 650 (est.); baldpate, 626 (est.); pintail, 1824 (est.); green-winged teal, 19; shoveller, 258 (est.); ring-necked duck, 14; canvas-back, 1354 (est.); scaup duck (sp.), 3465 (est.); Am. golden-eye, 135; buffle-head, 24; surf scoter, 3; ruddy duck, 1701 (est.); hooded merganser, 10; Am. merganser, 65; red-breasted merganser, 7; sharp-shinned hawk, 1; red-tailed hawk, 11; sparrow hawk, 11; California quail, 57; clapper rail, 9; Am. coot, 6082 (est.); semipalmated plover, 30; killdeer, 71; black-bellied plover, 578 (est.); Wilson's snipe, 1; willet, 332; greater yellow-legs, 3; least sandpiper, 1747 (est.); red-backed sandpiper, 1917 (est.); dowitcher (long-billed), 157; western sandpiper, 5915 (est.); marbled godwit, 202; sanderling, 208; avocet, 5115 (est.); glaucous-winged gull, 586 (est.); western gull, 109; herring gull, 37; California gull, 335; ring-billed gull, 300; short-billed gull, 105; Bonaparte's gull, 645 (est.); Forster's tern, 30; burrowing owl, 1; short-eared owl, 2; Anna's hummingbird, 6; belted kingfisher, 1; red-shafted flicker, 28; yellow-bellied sapsucker (red-breasted), 1; black phoebe, 7; Say's phoebe, 1; violet-green swallow, 1 (carefully observed at close range—S.T.B.); tree swallow, 2; Steller's jay, 1; scrub jay, 8; chestnut-backed chickadee, 1; plain titmouse, 3; bush-tit, 27; wren-tit, 5; robin, 703 (est.); varied thrush, 18; hermit thrush, 14; ruby-crowned kinglet, 3; Am. pipit, 172; cedar waxwing, 40; loggerhead shrike, 3; myrtle warbler, 2; Audubon's warbler, 28; yellow-throat, 18; English sparrow, 246; western meadowlark, 64; red-wing, 83; Brewer's blackbird, 202; house finch, 91; spotted towhee, 4; brown towhee, 25; Savannah sparrow, 11; Oregon junco, 32; white-crowned sparrow, 167; fox sparrow, 8; song sparrow, 41. **Total,** 91 species; about 38,589 individuals.—Harry C. Adamson, Bob Bailey, Seth T. Bailey, Garth E. Cummings, Harry W. Carriger, Charles Davis, Gordon W. Gullion, Alan Haight, Leroy L. Jensen, Junea W. Kelly, Milton L. Seibert.

350. Oceanside-Carlsbad, Calif. (Lt. Maxton Brown Bird Refuge and vicinity, within 15-mile diameter; salt marsh 85%, open fields, 10%, seashore 5%).—Dec. 29; 8 a.m. to 4:30 p.m. Fair; temp. 48° to 67°; wind N, veering to NW, 8-12 m.p.h. Eleven observers together. Total hours, 8 (7 afoot, 1 by car); total miles, 30 (4 afoot, 26 by car). Horned grebe, 1; eared grebe, 3; pied-billed grebe, 2; double-crested cormorant, 13; Am. egret, 14; snowy egret, 44; European widgeon, 1 (observed with 7x binoculars in good light about 20 minutes and compared with nearby baldpates—A.L.); baldpate, 11; pintail, 1519 (700 est., 819); green-winged teal, 10; cinnamon teal, 4; shoveller, 1836 (1500 est., 336); redhead, 19; canvas-back, 18; ruddy duck, 10; red-tailed hawk, 1; marsh hawk, 1; sparrow hawk, 6; clapper rail, 3; Am. coot, 261; killdeer, 11; willet, 6; greater yellow-legs, 2; least sandpiper, 200 (100 est., 100 actual count); western sandpiper, 5; marbled godwit, 2; sanderling, 17; avocet, 44; black-necked stilt, 2; glaucous-winged gull, 1; western gull, 564 (400 est., 164); Forster's tern, 2; royal tern, 5; mourning dove, 46; Anna's hummingbird, 11; red-shafted flicker, 1; Cassin's kingbird, 3; black phoebe, 7; Say's phoebe, 1; bush-tit, 83; wren-tit, 1; house wren, 1; long-billed marsh wren, 3; mockingbird, 1; Am. pipit, 11; loggerhead shrike, 2; Audubon's warbler, 74; yellow-throat, 12; English sparrow, 4; western meadowlark, 7;

red-wing, 5; Brewer's blackbird, 102; house finch, 48; Arkansas goldfinch, 3; brown towhee, 9; Savannah sparrow, 4; white-crowned sparrow (Gambel's), 63; song sparrow, 9. **Total,** 58 species; about 5149 individuals.—Mrs. Millard J. Beemer, M. A. Berry, Arnold Lane, Marjorie Moody, Lloyd Seigworth, Mercedes Taylor, Everett Thatcher, Mrs. Edith W. Thatcher, Terry Whittier, Mabel G. Whiting, Jack Young (Orange County Bird Club).

351. Orange County (central and coastal), Calif. (Huntington Beach, Newport Beach, Back Bay area inland 2½ miles; all within 15-mile diameter; urban 14%, salt marsh and lagoons 29.1%, cultivated farmland and open fields 56.9%).—Dec. 29, 8 a.m. to 5 p.m. Clear; temp. 30° to 60°; wind 0-5 m.p.h. Four observers together. Total hours, 8 (4 on foot, 4 by car); total miles, 63 (4 on foot, 58 by car). Horned grebe, 7; eared grebe, 2; western grebe, 5; pied-billed grebe, 10; brown pelican, 8; double-crested cormorant, 10; great blue heron, 5; Am. egret, 30; snowy egret (Brewster's), 6; Canada goose, 32; pintail, 1400; lesser scaup duck, 1; old-squaw, 1; surf scoter, 156; red-breasted merganser, 23; white-tailed kite, 1; sharp-shinned hawk, 1; red-tailed hawk (Krider's), 1; marsh hawk, 7; sparrow hawk, 5; Am. coot, 50; snowy plover, 2; killdeer, 17; black-bellied plover, 16; long-billed curlew, 5; Hudsonian curlew, 1; willet, 66; greater yellow-legs, 1; Baird's sandpiper, 3; least sandpiper, 450; dowitcher (long-billed), 82; western sandpiper, 270; marbled godwit, 225; sanderling, 22; avocet, 150; western gull, 317; California gull, 150; ring-billed gull, 282; unidentified gulls, 300 (either ring-billed or California); Bonaparte's gull, 8; Forster's tern, 76; mourning dove, 1; Chinese spotted dove, 1; road-runner, 2; red-shafted flicker, 4; black phoebe, 9; Say's phoebe, 6; horned lark, 83; scrub jay, 1; common raven, 2; Am. crow, 2; house wren, 1; Bewick's wren, 1; wren-tit, 2; mockingbird, 2; robin, 1; ruby-crowned kinglet, 4; Am. pipit, 31; cedar waxwing, 25; loggerhead shrike, 12; golden-crowned [orange-crowned? —Ed.] warbler, 2; Audubon's warbler, 3; yellow-throat, 13; English sparrow, 2; western meadowlark, 51; Brewer's blackbird, 540; house finch, 54; Am. goldfinch, 3; Arkansas goldfinch, 6; brown towhee, 3; Savannah sparrow, 26 (Savannah, 19; Belding's, 7); white-crowned sparrow (Gambel's), 100; song sparrow, 10. **Total,** 72 species; about 4907 individuals. (The second hunting season is open. Back Bay and Bolsa Chica areas now quite empty of waterfowl; a few days ago baldpate, pintail, green-winged teal, shoveller, canvas-back, both kinds of scaup, buffle-head, ruddy duck, and red-breasted merganser were to be seen. However, ½ mile from shore, there was a dark line for miles, many thousands, probably ten thousand ducks.)—Vanche E. Plumb, Florence Hullseik, Alice Zimmerman, Fern Zimmerman (Orange Co. Bird Club).

352. Orange County (northeastern), Calif. (Irvine Park, Irvine Lake, Modjeska canyon, Aliso canyon and Peter's canyon area, within 15-mile diameter; foothills 100%).—Dec. 29; 8 a.m. to 5 p.m. Clear; temp. 31° to 75°; wind, less than 1 m.p.h.; observation conditions ideal; ground damp from recent rains. Seven observers together. Total hours, 9 (6 afoot, 3 by car); total miles, 69 (3 afoot, 66 by car). Pied-billed grebe, 5; white pelican, 32; brown pelican, 4; double-crested cormorant, 79; great blue heron, 3; Am. egret, 5; black-crowned night heron, 1; whistling swan, 7 (distinctly seen by 6 observers at close range with Universal 6x30 glasses—M.R.H.); Canada goose, 26; mallard, 359 (325±50, 34); baldpate, 70; pintail, 5978 (5,700±1000, 273); green-winged teal, 40; shoveller, 912 (725±100, 187); canvas-back, 335 (275±50, 60); lesser scaup duck, 255 (210±95, 45); buffle-head, 100; ruddy duck, 60; turkey vulture, 1; sharp-shinned hawk, 1; red-tailed hawk, 10; ferruginous hawk, 4 (identified by 4 observers with Universal 6x30 binoculars; ruddy above and whitish below—M.R.H.); marsh hawk, 1; sparrow hawk, 9; California quail, 60; Am. coot, 200; killdeer, 30; road-runner, 4; horned owl, 1; Anna's hummingbird, 2; red-shafted flicker, 29; acorn woodpecker, 140; white-headed woodpecker, 1 (distinctly seen and identified by 3 observers at close range with 6x30 Universal binoculars, large white wing-patch showed in flight—M.R.H.); black phoebe, 8; Say's phoebe, 8; scrub jay, 45; Am. crow, 11; plain titmouse, 12; bush-tit, 67; wren-tit, 15; house wren, 2; mockingbird, 5; California thrasher, 3; hermit thrush, 1; ruby-crowned kinglet, 2; phainopepla, 3; loggerhead shrike, 1; Audubon's warbler, 190; western meadowlark, 28; red-wing, 70 (including bi-colored, 20); Brewer's blackbird, 40; purple finch, 2; house finch, 44; spotted towhee, 23; brown towhee, 85; Oregon junco, 14; white-crowned sparrow (Gambel's), 98; fox sparrow, 1; song sparrow, 4. **Total,** 60 species; about 9541 individuals.—Eric E. Eastman, Carl Nichols, Harry Prichard, Ruth M. Smith, Don P. Maher, Veda Mashmever, Margaret R. Harding (Orange Co. Bird Club).

353. Pasadena, Calif. (part of a 15-mile diameter circle centering at San Gabriel Blvd. and Lorain Rd.; from summit of Mt. Wilson, past San Jose Creek, including San Gabriel River Wildlife Sanctuary and adjacent prospective dam area; ponds 4½%, marshes 2½%, fields and roadsides 12%, river bed 2½%, river-bottom woodland 15%, live oak and sycamore woodland 21%, canyon riparian 4½%, chaparral 18%, pine-oak forest 2½%, park and residential area 17½%).—Dec. 26; midnight to 6 p.m. Partly cloudy, chilly; damp from recent rains; heavy downpour from 6 p.m. to midnight; wind 8-30 m.p.h., with gusts. Twenty-two observers in 11 parties. Total hours, 110 (105 on foot, 5 in car); total miles, 75 (65 on foot, 10 in car). Pied-billed

grebe, 4; great blue heron, 15; Am. egret, 61; snowy egret, 88; green heron, 1; black-crowned night heron, 8; mallard, 12; pintail, 3; shoveller, 23; canvas-back, 41; lesser scaup duck, 8; ruddy duck, 18; sharp-shinned hawk, 3; Cooper's hawk, 5; red-tailed hawk, 5; red-shouldered hawk, 6; marsh hawk, 1; prairie falcon, 1 (seen in area at other times during fall and winter—J.H.C.); pigeon hawk, 2 (M.S.D., G.W.); sparrow hawk, 24; California quail, 37; Am. coot, 284; killdeer, 241; greater yellow-legs, 5; Wilson's snipe, 7; least sandpiper, 7; California gull, 34; ring-billed gull, 45; band-tailed pigeon, 7; Chinese spotted dove, 59; mourning dove, 61; road-runner, 1; screetch owl, 2; white-throated swift, 54; Anna's hummingbird, 30; red-shafted flicker, 101; acorn woodpecker, 38; yellow-bellied sapsucker (red-breasted), 1; hairy woodpecker, 2; downy woodpecker, 14; Nuttall's woodpecker, 3; black phoebe, 72; Say's phoebe, 8; gray flycatcher, 1 (A.S.); horned lark, 4; tree swallow, 1 (H.L.); Steller's jay, 19; scrub jay, 71; Am. crow, 382; mountain chickadee, 16; plain titmouse, 20; bush-tit (coast type), 207; white-breasted nuthatch, 5; brown creeper, 1; wren-tit, 57; house wren, 13; Bewick's wren, 7; long-billed marsh wren, 4; cañon wren, 1; rock wren, 1; mockingbird, 57; California thrasher, 18; robin, 2534 (1500 est., 1034); varied thrush, 4; hermit thrush, 10; Townsend's solitaire, 1; blue-gray gnatcatcher, 14; ruby-crowned kinglet, 88; Am. pipit, 219; cedar waxwing, 1038 (700 est., 328); phainopepla, 2; loggerhead shrike, 40; Hutton's vireo, 1; solitary vireo, 1 (also seen previously in area—H.S.); orange-crowned warbler, 15; Audubon's warbler, 279; black-throated gray warbler, 1 (C.A., D.E.G.); Townsend's warbler, 1; yellow-throat, 51; black-capped warbler, 1 (A.S.); western meadowlark, 380; English sparrow, 95; red-wing, 379 (200 est., 179); Brewer's blackbird, 1101 (800 est., 301); western tanager, 1 (H.S., W.B.); cardinal, 21; purple finch, 14; Cassin's finch, 10; house finch, 723 (400 est., 323); Am. goldfinch, 52; Arkansas goldfinch, 45; Lawrence's goldfinch, 2; spotted towhee, 54; brown towhee, 114; Savannah sparrow, 102; lark sparrow, 102; Oregon junco, 69; white-crowned sparrow, 620 (250 est., 370); golden-crowned sparrow, 21; fox sparrow, 4; Lincoln's sparrow, 11; song sparrow, 99. **Total,** 102 species; about 10,646 individuals.—Charles Ayres, Mr. and Mrs. Willard Barnett, Arlan Bell, Howard L. Cogswell, Mr. and Mrs. J. H. Comby, Caroline H. Daugherty, M. S. Dunlap, Dorothy E. Groner, Dr. W. E. Heming, Hazel Lewis, Ralph E. Mall, Enid Michael, Helen S. Pratt, W. Dan Quattlebaum, Arnold Small, Mr. and Mrs. Hassel Smith, Alma Stultz, Dr. Robert L. Taylor, Gertrude Woods.

354. Pauma Valley (Northern San Diego Co.), Calif. (area 2¼ miles in diameter, including citrus and avocado groves, alfalfa fields, chaparral, Pauma Creek [flowing], Pauma Indian cemetery, Nigger Creek [dry], San Luis Rey River bottom [dry], Pauma School grounds, adjacent, live oak-wooded wash of Pauma Creek; elevation 1000 ft.).—Dec. 30; 8:30 a.m. (Calif. Daylight Saving Time) to 12:30 p.m., 1:30 to 5:30 p.m. Heavy to thin overcast; temp. 44° to 65°; slight breeze in a.m., calm in p.m. Total hours, 8 (7 afoot, 1 by car). Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 3; marsh hawk, 1; sparrow hawk, 5; California quail, 19; band-tailed pigeon, 194; road-runner, 1; killdeer, 54; Anna's hummingbird, 2; red-shafted flicker, 6; acorn woodpecker, 18; Lewis's woodpecker, 5; yellow-bellied sapsucker (red-naped), 2; downy woodpecker, 1; black phoebe, 4; Say's phoebe, 4; Steller's jay, 1; scrub jay, 10; Am. crow, 1; plain titmouse, 1; bush-tit, 13; wren-tit, 8; Bewick's wren, 4; California thrasher, 4; robin, 4; hermit thrush, 5; western bluebird, 15; Townsend's solitaire, 1; plumbeous gnatcatcher, 2; ruby-crowned kinglet, 9; Am. pipit, 14; cedar waxwing, 1; loggerhead shrike, 2; Audubon's warbler, 114; English sparrow, 5; western meadowlark, 14; Brewer's blackbird, 257; house finch, 19; Arkansas goldfinch, 2; spotted towhee, 10; brown towhee, 7; Savannah sparrow, 29; lark sparrow, 2; Oregon junco, 18; chipping sparrow, 49; white-crowned sparrow (Gambel's), 50 (partly est.); song sparrow, 3. **Total,** 48 species; about 996 individuals.—Eleanor Beemer.

355. Salinas (Monterey Co.), Calif. (Salinas, along Salinas River, out Reservation Rd., north to Moss Landing; approximately same area covered in preceding 4 years within diameter of 15 miles; willows 30%, open country 25%, slough 35%, ocean beach 5%, home neighborhood 5%).—Jan. 1; 8:30 a.m. to 4:30 p.m. Clear; temp. 50° to 52°; no wind. Observers together. Total hours, 10; total miles, 25 (7 on foot, 18 by car). Common loon, 2; arctic loon (Pacific), 2; red-throated loon, 2; Holboell's grebe, 1; horned grebe, 1; eared grebe, 1; western grebe, 115; pied-billed grebe, 5; white pelican, 4; brown pelican, 4; double-crested cormorant, 8; Brandt's cormorant, 3 (unusual at Moss Landing); great blue heron, 4; Am. egret, 8; snowy egret, 2; black-crowned night heron, 35; whistling swan, 24; canvas-back, 4; lesser scaup duck, 2; white-winged scoter, 20; surf scoter, 4; ruddy duck, 72; hooded merganser, 1; white-tailed kite, 1; Cooper's hawk, 1; red-tailed hawk, 1; red-shouldered hawk (red-bellied), 1; marsh hawk, 2; sparrow hawk, 13; California quail, 4; Am. coot, 238; snowy plover, 3; killdeer, 30; black-bellied plover, 66; Wilson's snipe, 6; long-billed curlew, 4; Hudsonian curlew, 2; willet, 35; greater yellow-legs, 2; least sandpiper, 200; red-backed sandpiper, 40; dowitcher, 10; western sandpiper, 66; marbled godwit, 109; sanderling, 40; avocet, 38; glaucous gull, 1; western gull, 12; herring gull, 22; ring-billed gull, 20; short-

billed gull, 175; Bonaparte's gull, 1; Heermann's gull, 1; mourning dove, 5; Anna's hummingbird, 1; red-shafted flicker, 8; acorn woodpecker, 12; hairy woodpecker, 1; downy woodpecker, 1; Nuttall's woodpecker, 1; black phoebe, 4; Say's phoebe, 3; horned lark, 2; violet-green swallow, 4; tree swallow, 10 (swallows were seen in vicinity Dec. 25 but not identified); scrub jay, 8; yellow-billed magpie, 28; Am. crow, 6; chestnut-backed chickadee, 16; plain titmouse, 2; bush-tit, 20; white-breasted nuthatch, 1; house wren, 5; Bewick's wren, 1; long-billed marsh wren, 2; robin, 32; varied thrush, 6; hermit thrush, 1; western bluebird, 15; blue-gray gnatcatcher, 2; ruby-crowned kinglet, 12; Am. pipit, 12; cedar waxwing, 22; shrike [sp.], 13; orange-crowned warbler, 5; myrtle warbler, 2; Audubon's warbler, 14; yellow-throat, 6; western meadowlark, 145; red-wing, 150; Brewer's blackbird, 247; house finch, 254; Arkansas goldfinch, 3; spotted towhee, 3; brown towhee, 5; Savannah sparrow, 9; lark sparrow, 55; Oregon junco, 10; white-crowned sparrow, 234; golden-crowned sparrow, 55; fox sparrow (sooty), 1; song sparrow, 13. **Total,** 102 species; about 2935 individuals. (Because of the hunting season most ducks had disappeared.)—Charles Anderson, Viola Anderson.

356. San Francisco, Calif. (Marina, Yacht Harbor, Palace of Fine Arts Lagoon, Laurel Hill Cemetery, Mountain Lake, Lincoln Park, Land's End, Sutro Heights, Seal Rocks, Ocean Beach, Golden Gate Park, Pine Lake, Stern Grove, Mt. Davidson, Twin Peaks, Mt. Sutro, Hunter's Point, Bay Shore Park, McLauren Park); ocean beach 8%, bay shore [with salt marsh and mud flats] 6%, parks 57%, fresh-water ponds and marsh 15%, open fields 8%, chaparral 6%).—Jan. 2. Clear; temp. 45° to 55°; wind NW, 15-to 20 m.p.h. Thirty observers in 8 parties; total party-hours, 67; total party-miles, 55 (53 on foot, 2 by car). Red-throated loon, 1; horned grebe, 4; eared grebe, 177; western grebe, 69; pied-billed grebe, 73; brown pelican, 34; double-crested cormorant, 109; Brandt's cormorant, 5; Baird's cormorant, 1; great blue heron, 1; green heron, 1; brant (black), 50 (est.); mallard, 994; baldpate, 252; pintail, 173; shoveller, 50; wood duck, 2; redhead, 7; ring-necked duck, 63; canvas-back, 302; scaup duck (sp.), 85; Am. golden-eye, 2; bufflehead, 2; white-winged scoter, 50 (est.); surf scoter, 105 (est.); ruddy duck, 133; red-breasted merganser, 12; sharp-shinned hawk, 2; Cooper's hawk, 2; red-tailed hawk, 3; marsh hawk, 1; sparrow hawk, 14; California quail, 331; Am. coot, 645; killdeer, 46; surf-bird, 6; black turnstone, 9; Wilson's snipe, 2; sanderling, 50; glaucous-winged gull, 1010 (est.); western gull, 480 (est.); herring gull, 36; California gull, 561 (est.); ring-billed gull, 132 (est); short-billed gull, 64; (est.); Bonaparte's gull, 13; Heermann's gull, 1; mourning dove, 1; Anna's hummingbird, 127; belted kingfisher, 2; red-shafted flicker, 62; yellow-bellied sapsucker (red-breasted), 1; downy wodpecker, 9; black phoebe, 34; Say's phoebe, 1; scrub jay, 13; common raven, 3; chestnut-backed chickadee, 111; bush-tit, 84; red-breasted nuthatch, 7; brown creeper, 8; wren-tit, 1; winter wren, 3; Bewick's wren, 3; long-billed marsh wren, 1; robin, 117; varied thrush, 60; hermit thrush, 35; ruby-crowned kinglet, 42; Am. pipit, 25; cedar waxwing, 5; loggerhead shrike, 1; Hutton's vireo, 17; myrtle warbler, 25; orange-crowned warbler (lutescent), 1; Audubon's warbler, 205; Townsend's warbler, 28; yellow-throat, 10; black-capped warbler, 1; English sparrow, 185; western meadowlark, 52; Brewer's blackbird, 913; purple finch, 4; house finch, 65; pine siskin, 18; Am. goldfinch, 2; Arkansas goldfinch (green-backed), 1; spotted towhee, 19; Savannah sparrow, 4; Oregon junco, 215; white-crowned sparrow, 732; golden-crowned sparrow, 31; fox sparrow, 69; song sparrow, 137. **Total,** 94 species; about 9655 individuals.—Mr. and Mrs. Harry Adamson, Sadie Bozant, W. W. Bradley, Mrs. M. Brown, Donald Brock, B. C. Cain, C. L. Carson, Howard Cogswell, Jean Fay, Mrs. M. Jones, Junea Kelly, Mr. and Mrs. George Kilham, Mr. and Mrs. Herman V. Leffler, Terrence J. Merkel, Mr. and Mrs. George Nielsen, H. G. Peterson, R. H. Pray, Ethel Richardson, Kenneth Schultz, Robert Will and 6 Scouts (Audubon Association of the Pacific).

357. Yosemite Valley, Yosemite National Park, Calif. (Mirror Lake, 4000 ft. elevation, to El Portal, 2000 ft. elevation; 15-mile distance).—Dec. 29; 9 a.m. to 5 p.m. Cloudy; snow on ground and trees, no wind; temp. 26° to 41°. Eleven observers in 4 groups. Total miles afoot, 10; total hours afoot, 19. Pied-billed grebe, 1; great blue heron, 1; red-tailed hawk, 1; golden eagle, 2; peregrine falcon, 1; sparrow hawk, 1; mountain quail, 8; pygmy owl, 1; belted kingfisher, 6; red-shafted flicker, 7; pileated woodpecker, 3; acorn woodpecker, 32; hairy woodpecker, 3; downy woodpecker, 1; white-headed woodpecker, 13; black phoebe, 3; Steller's jay, 88; scrub jay, 1; Clark's nutcracker, 2; mountain chickadee, 34; red-breasted nuthatch, 6; brown creeper, 54; dipper, 9; winter wren, 6; cañon wren, 5; robin, 4; varied thrush, 4; hermit thrush, 1; mountain bluebird, 3; Townsend's solitaire, 1; golden-crowned kinglet, 116; ruby-crowned kinglet, 16; Am. pipit, 1; English sparrow, 12; pine siskin, 12; Arkansas goldfinch, 6; spotted towhee, 17; brown towhee, 8; slate-colored junco, 2; Oregon junco, 126; white-crowned sparrow, 1; song sparrow, 3. **Total,** 42 species; 622 individuals.—Mr. and Mrs. Walter J. Fitzpatrick, Mrs. Grace Ewing, Mrs. Ruth K. Knowles, Mrs. Sally Knowles Plumb, Virginia Ann Sturm, Richard Russell, Mrs. Bona May McHenry, Robert N. McIntyre, Harold E. Perry, Harry C. Parker (Associate Park Naturalist).

Summary of Largest Counts of Individuals

Chandler S. Robbins

For the second year a summary has been prepared showing the size and locality of the highest count for each species in continental North America. While this falls far short of showing the areas of actual greatest abundance of each species at Christmas time, it should prove of considerable interest for the following reasons: (1) except in the case of great rarities, this list indicates the section of the country, and at least one specific locality, where each species occurs in abundance; (2) by combining all subspecies it gives the inexperienced observer a better appreciation of the abundance of each species in his own locality compared with other parts of the country; (3) by stimulating friendly competition in counting individuals, it takes some of the emphasis off the race for a high species count; (4) over a period of years it calls attention to shifts in populations and to changes in abundance in the principal wintering grounds of many species; and (5) it serves as an index to the species recorded each year, and points out many of the greatest rarities.

The total number of species reported without editorial comment in the 49th Christmas Bird Count was 422, 7 more than in the previous year. The difference can be entirely accounted for by greater care in reporting details of rarities, and by the increased number of published counts. The highest total for each species, together with the census or censuses reporting this total is as follows:

Common loon, 31 (*N.C.*, Wilmington); arctic loon, 6 (*Calif.*, Monterey); red-throated loon, 37 (*N.Y.*, Southern Nassau Co., L.I.); Holboell's grebe, 4 (*Conn.*, Saybrook); horned grebe, 199 (*Md.*, Kent Is.); eared grebe, 177 (*Calif.*, San Francisco); least grebe, 15 (*Tex.*, Harlingen); western grebe, 115 (*Calif.*, Salinas); pied-billed grebe, 88 (*Fla.*, Tallahassee); fulmar, 32 (*Calif.*, Monterey Peninsula); white pelican, 345 (*Tex.*, Houston); brown pelican, 881 (*Fla.*, St. Petersburg); gannet, 150 (*N.C.*, Pea Is.); European cormorant, 90 (*R.I.*, South Kingston); double-crested cormorant, 1515 (*Calif.*, Oakland); Mexican cormorant, 117 (*Tex.*, Harlingen); Brandt's cormorant, 339 (*Calif.*, Monterey Peninsula); pelagic cormorant, 86 (*Calif.*, Monterey Peninsula); water-turkey, 50 (*Tex.*, Harlingen); man-o'-war-bird, 7 (*Fla.*, Key West); great white heron, 4 (*Fla.*, Paradise Key); great blue heron, 108 (*Fla.*, St. Petersburg); Am. egret, 1050 (*Fla.*, Cape Sable); snowy egret, 207 (*Tex.*, Harlingen); Louisiana heron, 228 (*Fla.*, St. Augustine); little blue heron, 613 (*Fla.*, Monroe); green heron, 23 (*Fla.*, Paradise Key); black-crowned night heron, 190 (*Fla.*, Opa-Locka); yellow-crowned night heron, 65 (*Fla.*, Opa-Locka); Am. bittern, 8 (*Fla.* Monroe); least bittern, 1 (*Tex.*, Harlingen); wood ibis, 330 (*Fla.*, Cape Sable); white-faced glossy, 140 (*Tex.*, Harlingen); white ibis, 831 (*Fla.*, Monroe).

Mute swan, 110 (*N.Y.*, Amagansett, L.I.); whistling swan, 3005 (*Md.*, Kent Is.); Canada goose, 20,000 (*N.C.*, New Holland); brant, 10,000 (*Md.*, Ocean City); white-fronted goose, 152 (*Calif.*, Marysville); snow goose, 11,500 (*N.C.*, Pea Is.); blue goose, 1000 (*Ill.*, Pere Marquette State Park); mallard, 55,000 (*Mo.*, Squaw Creek Nat'l. Wildlife Refuge); black duck, 4000 (*N.Y.*, Western Long Is.); mottled duck, 31 (*Tex.*, Harlingen); gadwall, 2000 (*N.Mex.*, Bosque del Apache Nat'l. Wildlife Refuge); European widgeon, 4 (*N.Y.*, Amagansett, L.I.); baldpate, 9667 (*Oreg.*, Portland); pintail, 5973 (*Calif.*, Orange Co., northeastern); green-winged teal, 3399 (*Oreg.*, Portland); blue-winged teal, 800 (*Fla.*, Cape Sable); cinnamon teal, 9 (*Utah*, Salt Lake City); shoveller, 1836 (*Calif.*, Oceanside-Carlsbad); wood duck, 12 (*Ga.*, Sherwood and Birdsong Plantations); redhead, 5000 (*N.Y.*, Keuka Park); ring-necked duck, 1050 (*Fla.*, Tallahassee); canvas-back, 5300 (*Md.*, Wicomico); [scaup duck (sp.) 7500 (*R.I.*, Providence)]; greater scaup duck, 6780 (*N.Y.*, Staten Is.); lesser scaup duck, 5986 (*Fla.*, Cedar Key); Am. golden-eye, 2733 (*N.Y.*, Buffalo); Barrow's golden-eye, 1 (*Mass.*, Cape Ann, Cape Cod and Lynn); buffle-head, 650 (*Md.*, Ocean City); old-squaw, 530 (*Mass.*, Cape Cod); harlequin duck, 2 (*Mass.*, Cape Cod); Am. eider, 3800 (*Mass.*, Cape Cod); king eider, 3 (*Mass.*, Cape Cod); white-winged scoter, 1100 (*N.Y.*, Smithtown, L.I.); surf scoter, 1300 (*Md.*, Ocean City); Am. scoter, 270 (*Md.*, Ocean City); ruddy duck, 6880 (*Md.*, So. Anne Arundel Co.); hooded merganser, 59 (*Ky.*, Kentucky Lake); Am. merganser, 3179 (*N.Y.*, Buffalo); red-breasted merganser, 1520 (*N.Y.*, Brooklyn).

Turkey vulture, 383 (*Md.*, Ocean City); black vulture, 189 (*Tex.*, Harlingen); white-tailed kite, 1 (*Calif.*, Crystal Springs Reservoir, Orange Co., central and coastal, and Salinas); Mississippi kite, 1 (*Tex.*, Houston); goshawk, 2 (*Ohio*, Bucyrus); sharp-shinned hawk, 9 (*Calif.*, Los Angeles); Cooper's hawk, 13 (*Tex.*, Harlingen); red-tailed hawk, 47 (*Tex.*, Houston); Harlan's hawk, 2 (*Kans.*, Baldwin); red-shouldered hawk, 18 (*Tex.*, Houston); broad-winged hawk, 3 (*Fla.*, Key West); short-tailed hawk, 1 (*Fla.*, Cape Sable); rough-legged hawk, 27 (*N.Y.*, Buffalo); ferruginous hawk, 18 (*Colo.*, Barr Lake); Harris's hawk, 18 (*Ariz.*, Havasu Lake Nat'l. Wildlife Refuge); golden eagle, 7 (*S.Dak.*, LaCreek Nat'l. Wildlife Refuge); bald eagle, 38 (*Ill.*, Pere Marquette State Park); marsh hawk, 101 (*Tex.*, Harlingen); osprey, 6 (*Fla.*, Ft.

Pierce); Audubon's caracara, 25 (*Tex.*, Harlingen); gyrfalcon, 1 (*Mass.*, Cape Cod); prairie falcon, 1 (*Colo.*, Barr Lake; *Ariz.*, Santa Catalina Mts.; *Calif.*, Big Bear Lake, Pasadena, and Los Angeles); peregrine falcon, 5 (*Tex.*, Harlingen); pigeon hawk, 3 (Washington, *D.C.*); sparrow hawk, 96 (*Tex.*, Harlingen); chachalaca, 2 (*Tex.*, Harlingen); blue grouse, 11 (*Wyom.*, Casper); ruffed grouse, 14 (*Vt.*, Wells River; *Wyom.*, Moose); greater prairie chicken, 4 (*Nebr.*, Wisner); sharp-tailed grouse, 42 (*N.Dak.*, Lower Souris Nat'l. Wildlife Refuge); sage hen, 6 (*Wyom.*, Casper); European partridge, 39 (*N.Dak.*, Lower Souris Nat'l. Wildlife Refuge; *Wash.*, Spokane); bob-white, 54 (*Nebr.*, North Platte); scaled quail, 2 (*Tex.*, El Paso); California quail, 1049 (*Utah*, Salt Lake City); Gambel's quail, 200 (*Ariz.*, Tucson); mountain quail, 15 (*Oreg.*, Klamath Falls); ring-necked pheasant, 808 (*S.Dak.*, LaCreek Nat'l. Wildlife Refuge); turkey, 2 (*Fla.*, Monroe); sandhill crane, 42 (*Oreg.*, Portland); limpkin, 16 (*Fla.*, Paradise Key); king rail, 3 (*Fla.*, Jacksonville); clapper rail, 9 (*Fla.*, Jacksonville; *Calif.*, Oakland); Virginia rail, 4 (*Calif.*, Monterey); sora, 17 (*Fla.*, Opa-Locka); yellow rail, 1 (*Mass.*, Cape Cod); purple gallinule, 3 (*Fla.*, Paradise Key); Florida gallinule, 27 (*Fla.*, St. Petersburg); Am. coot, 6082 (*Calif.*, Oakland).

Am. oyster-catcher, 200 (*S.C.*, Charleston); black oyster-catcher, 4 (*Calif.*, Monterey Peninsula); piping plover, 8 (*Fla.*, Daytona Beach); snowy plover, 41 (*Calif.*, Monterey Peninsula); semipalmated plover, 77 (*Ga.*, Brunswick); Wilson's plover, 38 (*Fla.*, St. Petersburg); mountain plover, 105 (*Calif.*, Calipatria); killdeer, 250 (*Calif.*, Morro Bay); black-bellied plover, 578 (*Calif.*, Oakland); surfbird, 20 (*Calif.*, Monterey Peninsula); ruddy turnstone, 142 (*Fla.*, St. Augustine); black turnstone, 93 (*Calif.*, Los Angeles); Am. woodcock, 3 (*Ga.*, Sherwood and Birdsong Plantations; *La.*, St. Francisville; *Tex.*, Houston); Wilson's snipe, 65 (*Fla.*, Tallahassee; *Tex.*, Harlingen); long-billed curlew, 66 (*Calif.*, Morro Bay); Hudsonian curlew, 7 (*Calif.*, Los Angeles); spotted sandpiper, 48 (*Fla.*, St. Petersburg); solitary sandpiper, 1 (*La.*, St. Francisville); willet, 5300 (*Calif.*, Morro Bay); greater yellow-legs, 80 (*Calif.*, Calipatria); lesser yellow-legs, 150 (*Fla.*, Cape Sable); knot, 14 (*Calif.*, Morro Bay); purple sandpiper, 66 (*Mass.*, Cape Ann); Baird's sandpiper, 3 (*Calif.*, Orange Co., central and coastal); least sandpiper, 1747 (*Calif.*, Oakland); red-backed sandpiper, 3486 (*N.J.*, Cape May); dowitcher, 500 (*Calif.*, Los Angeles); semipalmated sandpiper, 125 (*N.C.*, Pea Is.); western sandpiper, 5915 (*Calif.*, Oakland); marbled godwit, 1410 (*Calif.*, Morro Bay); sanderling, 366 (*Md.*, Ocean City); avocet, 5115 (*Calif.*, Oakland); black-necked stilt, 25 (*Tex.*, Harlingen).

Parasitic jaeger, 2 (*Fla.*, St. Augustine); glaucous gull, 4 (*Minn.*, Duluth); Iceland gull, 4 (*Mass.*, Cape Ann); glaucous-winged gull, 1638 (*Oreg.*, Portland); great black-backed gull, 400 (*N.J.*, Long Branch); western gull, 564 (*Calif.*, Oceanside-Carlsbad); herring gull, 10,000 (*N.Y.*, Brooklyn); California gull, 4682 (*Calif.*, Los Angeles); ring-billed gull, 2239 (*Ky.*, Kentucky Lake); short-billed gull, 530 (*Calif.*, Crystal Springs Reservoir); black-headed gull, 1 (*N.Y.*, Brooklyn, and Manhattan); laughing gull, 600 (*Fla.*, St., Augustine); Franklin's gull, 6 (*Tex.*, Harlingen); Bonaparte's gull, 2000 (*Ont.*, Blenheim); little gull, 1 (*N.Y.*, Manhattan); Heermann's gull, 65 (*Calif.*, Los Angeles); common kittiwake, 6 (*Mass.*, Cape Ann); gull-billed tern, 26 (*Tex.*, Houston); Forster's tern, 500 (*Fla.*, Jacksonville); common tern, 28 (*Fla.*, St. Augustine); least tern, 2 (*Fla.*, Ft. Pierce); royal tern, 1344 (*Fla.*, Daytona Beach); Cabot's tern, 3 (*Fla.*, St. Petersburg); Caspian tern, 20 (*Fla.*, Jacksonville); black tern, 1 (*N.C.*, Wilmington); black skimmer, 4000 (*Fla.*, St. Augustine); razor-billed auk, 2 (*N.Y.*, Montauk, L.I.); common murre, 1 (*Calif.*, Crystal springs Reservoir); dovekie, 12 (*N.Y.*, At sea off Brooklyn); black guillemot, 4 (*Mass.*, Cape Ann); ancient murrelet, 4 (*Calif.*, Monterey Peninsula); rhinoceros auklet, 1 (*Calif.*, Monterey).

Band-tailed pigeon, 430 (*Calif.*, Crystal Springs Reservoir); rock dove, 1000 (*N.Y.*, Manhattan); mourning dove, 381 (*Ariz.*, Tucson); Chinese spotted dove, 124 (*Calif.*, Los Angeles); ringed turtle dove, 101 (*Calif.*, Los Angeles); white-winged dove, 2 (*Fla.*, Key West); ground dove, 160 (*Tex.*, Harlingen); Inca dove, 53 (*Ariz.*, Tucson); white-fronted dove, 14 (*Tex.*, Harlingen); road-runner, 5 (*Calif.*, Calipatria); barn owl, 21 (*Calif.*, Marysville); common screech owl, 7 (*N.Y.*, Buffalo); horned owl, 15 (*Ont.*, Hamilton); snowy owl, 1 (*Minn.*, Duluth); mountain pygmy owl, 1 (*Calif.*, Yosemite; *Utah*, Salt Lake City); ferruginous pygmy owl, 1 (*Tex.*, Harlingen); burrowing owl, 3 (*Tex.*, Harlingen); barred owl, 7 (*La.*, St. Francisville); long-eared owl, 6 (*N.Y.*, Bronx and So. Nassau Co.); short-eared owl, 12 (*N.J.*, Elizabeth); saw-whet owl, 3 (*Calif.*, Marysville; *Iowa*, Des Moines); pauraque, 3 (*Tex.*, Harlingen); white-throated swift, 121 (*Calif.*, Los Angeles); ruby-throated hummingbird, 1 (*Fla.*, Paradise Key; *Tex.*, Harlingen); Anna's hummingbird, 135 (*Calif.*, Los Angeles); broad-billed hummingbird, 1 (*Ariz.*, Tucson); belted kingfisher, 72 (*Fla.*, St. Petersburg); green kingfisher, 17 (*Tex.*, Harlingen); yellow-shafted flicker, 165 (*Tenn.*, Memphis); red-shafted flicker, 158 (*Utah*, Salt Lake City); gilded flicker, 11 (*Ariz.*, Tucson); pileated woodpecker, 17 (*Md.*, Ocean City; *Ky.*, Kentucky Lake); red-bellied woodpecker, 100 (*Ill.*, Pere Marquette State Park); golden-fronted woodpecker, 38 (*Tex.*, Harlingen); Gila woodpecker, 61 (*Ariz.*, Santa Catalina Mts.); red-headed woodpecker, 110 (*Ill.*, Pere Marquette State Park); acorn woodpecker, 140 (*Calif.*, Orange County, northeastern); Lewis's woodpecker, 36 (*Colo.*, Ft. Collins); yellow-bellied sapsucker, 41 (*La.*, St. Francisville); Williamson's sapsucker, 2 (*Ariz.*, Santa Catalina Mts.); hairy woodpecker, 36

(*Ohio*, Sugar Grove); downy woodpecker, 107 (*Ohio*, Cincinnati); ladder-backed woodpecker, 25 (*Tex.*, Harlingen); Nuttall's woodpecker, 3 (*Calif.*, Los Angeles, Pasadena, Bakersfield); Arizona woodpecker, 2 (*Ariz.*, Santa Catalina Mts.); red-cockaded woodpecker, 12 (*N.C.*, Wilmington); white-headed woodpecker, 13 (*Calif.*, Yosemite).

Mexican kingbird, 36 (*Tex.*, Harlingen); western kingbird, 1 (*N.C.*, Wilmington; *Calif.*, Norco); Cassin's kingbird, 3 (*Calif.*, Oceanside-Carlsbad); derby flycatcher, 44 (*Tex.*, Harlingen); crested flycatcher, 5 (*Fla.*, Paradise Key); ash-throated flycatcher, 2 (*Calif.*, Los Angeles); eastern phoebe, 53 (*Fla.*, Tallahassee); black phoebe, 103 (*Calif.*, Los Angeles); Say's phobe, 50 (*Calif.*, Calipatria); least flycatcher, 1 (*Tex.*, Harlingen); gray flycatcher, 1 (*Calif.*, Pasadena); wood pewee [sp.], 2 (*Tex.*, Harlingen); vermilion flycatcher, 67 (*Tex.*, Harlingen); beardless flycatcher, 1 (*Tex.*, Harlingen; *Ariz.*, Tucson); horned lark, 2724 (*Utah*, Bear River Migratory Bird Refuge); violet-green swallow, 20 (*Calif.*, Monterey Peninsula); tree swallow, 2606 (*Fla.*, Daytona Beach); rough-winged swallow, 120 (*Fla.*, Opa-Locka); Canada jay, 2 (*Wyom.*, Moose); blue jay, 292 (*Tenn.*, Memphis); Steller's jay, 88 (*Calif.*, Yosemite); scrub jay, 140 (*Calif.*, Los Angeles); Arizona jay, 15 (*Ariz.*, Santa Catalina Mts.); green jay, 50 (*Tex.*, Harlingen); Am. magpie, 381 (*Wyom.*, Casper); yellow-billed magpie, 75 (*Calif.*, Marysville); common raven, 42 (*Mont.*, Fortine); white-necked raven, 170 (*Tex.*, Midland); Am. crow, 32,128 (*Pa.*, Allentown); fish crow, 78 (*Fla.*, Daytona Beach); Clark's nutcracker, 10 (*Wyom.*, Moose); black-capped chickadee, 510 (*Mass.*, Cape Cod); Carolina chickadee, 335 (*W.Va.*, Charleston); mountain chickadee, 52 (*Oreg.*, Klamath Falls); brown-capped chickadee, 16 (*N.B.*, Sackville); chestnut-backed chickadee, 111 (*Calif.*, San Francisco); tufted titmouse, 294 (*D.C.*, Washington); black-crested titmouse, 57 (*Tex.*, Harlingen; plain titmouse, 26; (*Calif.*, Los Angeles); bridled titmouse, 4 (*Ariz.*, Santa Catalina Mts.); verdin, 30 (*Ariz.*, Tucson); bush-tit, 312 (*Calif.*, Los Angeles); white-breasted nuthatch, 141 (*Ohio*, Buckeye Lake); red-breasted nuthatch, 20 (*Minn.*, Duluth); brown-headed nuthatch, 187 (*N.C.*, Wilmington); pygmy nuthatch, 22 (*Ariz.*, Santa Catalina Mts.); brown creeper, 54 (*Calif.*, Yosemite).

Wren-tit, 112 (*Calif.*, Los Angeles); dipper, 10 (*Colo.*, Ft. Collins); house wren, 32 (*Fla.*, St. Petersburg); winter wren, 48 (*Oreg.*, Portland); Bewick's wren, 36 (*Oreg.*, Portland); Carolina wren, 94 (*W.Va.*, Charleston); cactus wren, 38 (*Ariz.*, Tucson); long-billed marsh wren, 30 (*Md.*, So. Dorchester Co.); short-billed marsh wren, 13 (*Va.*, Back Bay Nat'l. Wildlife Refuge; *Fla.*, Opa-Locka); cañon wren, 5 (*Calif.*, Yosemite); rock wren, 9 (*Ariz.*, Santa Catalina Mts.); mockingbird, 253 (*Fla.*, St. Petersburg); catbird, 26 (*Fla.*, Key West); brown thrasher, 86 (*La.*, St. Francisville); Sennett's thrasher, 8 (*Tex.*, Harlingen); Bendire's thrasher, 8 (*Ariz.*, Tucson); curve-billed thrasher, 40 (*Ariz.*, Tucson); California thrasher, 65 (*Calif.*, Los Angeles); crissal thrasher, 6 (*Ariz.*, Havasu Lake Nat'l. Wildlife Refuge); sage thrasher, 2 (*Tex.*, Harlingen); robin, 2406 (*Oreg.*, Eugene); varied thrush, 231 (*Oreg.*, Portland); hermit thrush, 70 (*La.*, St. Francisville); olive-backed thrush, 3 (*Tex.*, Houston); gray-cheeked thrush, 1 (*Ind.*, Lafayette); eastern bluebird, 350 (*Tex.*, Houston); western bluebird, 42 (*Calif.*, Marysville); mountain bluebird, 55 (*Tex.*, Big Spring); Townsend's solitaire, 8 (*Nebr.*, Nebr. Nat'l. Forest); blue-gray gnatcatcher, 134 (*Fla.*, Monroe); plumbeous gnatcatcher, 6 (*Ariz.*, Tucson); golden-crowned kinglet, 350 (*Oreg.*, Portland); ruby-crowned kinglet, 244 (*La.*, St. Francisville); Am. pipit, 1000 (*N.J.*, Cape May); Bohemian waxwing, 456 (*Mont.*, Kalispell); cedar waxwing, 1038 (*Calif.*, Pasadena); phainopepla, 20 (*Calif.*, Calipatria); northern shrike, 3 (*Utah*, Salt Lake City); loggerhead shrike, 99 (*Fla.*, St. Petersburg); starling, 50,000 (*N.J.*, Raritan Estuary).

White-eyed vireo, 26 (*Fla.*, Monroe); Hutton's vireo, 17 (*Calif.*, San Francisco); solitary vireo, 7 (*La.*, St. Francisville); black and white warbler, 15 (*Tex.*, Harlingen); orange-crowned warbler, 22 (*La.*, St. Francisville); Nashville warbler, 2 (*Tex.*, Harlingen); parula warbler, 6 (*Fla.*, St. Augustine); myrtle warbler, 5000 (*Fla.*, St. Augustine); Audubon's warbler, 1672 (*Calif.*, Los Angeles); black-throated gray warbler, 1 (*Ariz.*, Santa Catalina Mts.; *Calif.*, Pasadena); Townsend's warbler, 28; (*Calif.*, San Francisco); black-throated green warbler, 12 (*Tex.*, Harlingen); yellow-throated warbler, 6 (*Fla.*, Tallahassee, and Paradise Key); pine warbler, 96 (*Ga.*, Sherwood and Birdsong Plantations); prairie warbler, 5 (*Fla.*, Monroe); palm warbler, 366 (*Fla.*, St. Petersburg); oven-bird, 1 (*N.J.*, Cape May; *Fla.*, Paradise Key); Louisiana water-thrush, 1 (*Fla.*, Paradise Key); yellow-throat, 60 (*Fla.*, Monroe); yellow-breasted chat, 1 (*Mass.*, Cape Ann., and Lynn; *La.*, St. Francisville); black-capped warbler, 1 (*Calif.*, Pasadena, and San Francisco); Am. redstart, 2 (*Fla.*, Paradise Key); English sparrow, 4927 (*Utah*, Salt Lake City); European tree sparrow, 44 (*Ill.*, East St. Louis); eastern meadowlark, 1028 (*Md.*, Ocean City); western meadowlark, 730 (*Calif.*, Crystal Springs Reservoir); yellow-headed blackbird, 751 (*Ariz.*, Tucson); red-wing, 2,430,000 (*Tenn.*, Reelfoot Lake); tri-colored blackbird, 30 (*Calif.*, Monterey); orchard oriole, 1 (*N.C.*, Mt. Olive); Audubon's oriole, 3 (*Tex.*, Harlingen); Baltimore oriole, 3 (*Fla.*, Key West); Bullock's oriole, 1 (*Mass.*, Northampton); rusty blackbird, 2500 (*Tenn.*, Reelfoot Lake); Brewer's blackbird, 40,000 (*Tex.*, Houston); boat-tailed grackle, 1300 (*Tex.*, Harlingen); purple grackle, 200,000 (*Md.*, Susquehanna Flats—Sassafras River); brown-headed cowbird, 50,000 (*Tex.*, Houston); red-eyed cowbird, 3 (*Tex.*, Harlingen); western tanager, 1 (*Calif.*, Pasadena); summer tanager, 1 (*Tex.*, Har-

lingen).

Cardinal, 534 (*W.Va.*, Charlestown); pyrrhuloxia, 26 (*Ariz.*, Tucson); painted bunting, 4 (*Fla.*, Ft. Pierce); evening grosbeak, 175 (*Wash.*, Spokane); purple finch, 150 (*Oreg.*, Portland); Cassin's finch, 150 (*Wash.*, Spokane); house finch, 1474 (*Calif.*, Los Angeles); Sharpe's seedeater, 10 (*Tex.*, Harlingen); pine grosbeak, 221 (*Minn.*, Duluth); gray-crowned rosy finch, 236 (*Wyom.*, Casper); black rosy finch, 38 (*Utah*, Salt Lake City); common redpoll, 350 (*Mont.*, Fortine); pine siskin, 265 (*Utah*, Salt Lake City); Am. goldfinch, 918 (*Oreg.*, Portland); Arkansas goldfinch, 54 (*Calif.*, Los Angeles); red crossbill, 92 (*Wash.*, Spokane); white-winged crossbill, 8 (*N.B.*, Sackville); Texas sparrow, 41 (*Tex.*, Harlingen); green-tailed towhee, 7 (*Ariz.*, Tucson); eastern towhee, 205 (*Ky.*, Kentucky Lake); spotted towhee, 164 (*Oreg.*, Portland); brown towhee, 201 (*Calif.*, Los Angeles); Abert's towhee, 33 (*Ariz.*, Tucson); lark bunting, 1222 (*Ariz.*, Tucson); Ipswich sparrow, 4 (*N.J.*, Cape May); Savannah sparrow, 462 (*Tex.*, Harlingen); grasshopper sparrow, 2 (*Ga.*, Sherwood and Birdsong Plantations); Baird's sparrow, 12 (*Tex.*, Harlingen); Leconte's sparrow, 8 (*Miss.*, Moon Lake); Henslow's sparrow, 5 (*Tex.*, Commerce); sharp-tailed sparrow, 5 (*N.J.*, Cape May); seaside sparrow, 10 (*N.C.*, Wilmington); vesper sparrow, 55 (*Tex.*, Houston); lark sparrow, 225 (*Tex.*, Harlingen); rufous-crowned sparrow, 5 (*Calif.*, Los Angeles); pinewoods sparrow, 6 (*Fla.*, Ft. Pierce); Cassin's sparrow, 6 (*Tex.*, Harlingen); black-throated sparrow, 25 (*Tex.*, Harlingen); sage sparrow, 12 (*N.Mex.*, Bosque del Apache Nat'l. Wildlife Refuge); white-winged junco, 8 (*Colo.*, Ft. Collins); slate-colored junco, 1271 (*Pa.*, West Chester); Oregon junco, 1603 (*Oreg.*, Portland); gray-headed junco, 660 (*Colo.*, Durango); Arizona junco, 3 (*Ariz.*, Santa Catalina Mts.); tree sparrow, 974 (*Pa.*, West Chester); chipping sparrow, 267 (*S.C.*, Charleston); clay-colored sparrow, 7 (*Tex.*, Harlingen); Brewer's sparrow, 12 (*Ariz.*, Tucson); field sparrow, 354 (*Miss.*, Tupelo); black-chinned sparrow, 2 (*Ariz.*, Santa Catalina Mts.); Harris's sparrow, 117 (*Tex.*, Commerce); white-crowned sparrow, 732 (*Calif.*, San Francisco); golden-crowned sparrow, 116 (*Oreg.*, Portland); white-throated sparrow, 1467 (*Tenn.*, Memphis); fox sparrow, 69 (*Calif.*, San Francisco); Lincoln's sparrow, 42 (*Tex.*, Harlingen); swamp sparrow, 168 (*La.*, St. Francisville); song sparrow, 1001 (*Oreg.*, Portland); McCown's longspur, 3 (*N.Mex.*, Socorro); Lapland longspur, 500 (*Kans.*, Wichita); snow bunting, 2475 (*N.Y.*, Hamburg).

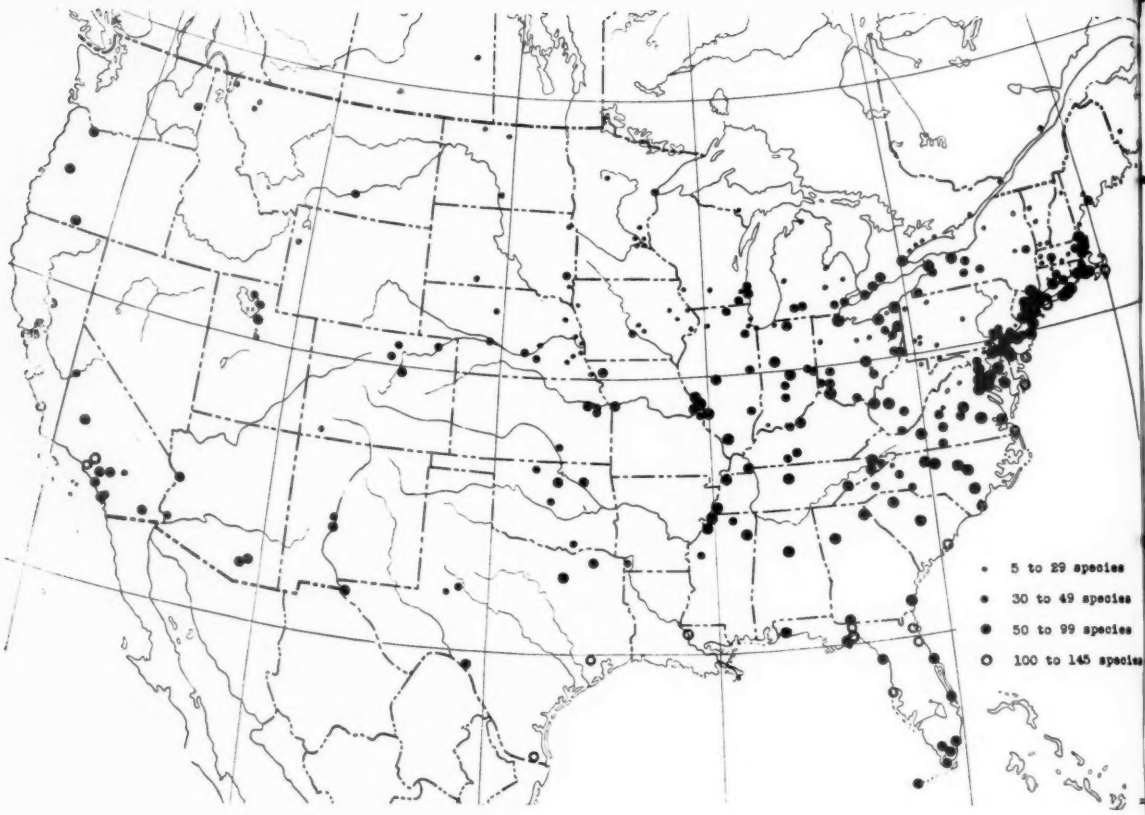
Erratum—The Editors regret the mislabeling of Mr. Griscom's column in the February issue. It should have read *Summary of the Fall Migration*, not *Nesting Season*.

ARE YOU PLANNING TO TAKE A BREEDING BIRD CENSUS?

The Deadline Will be

September 15, 1949.

Revised Instructions Were Printed in March 1948 Issue.



Distribution of the Forty-ninth Christmas Bird Count

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